

ENERGY EFFICIENCY COMMITTEE
PUBLIC BENEFITS PROGRAM WORKSHOP
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

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CALIFORNIA ENERGY COMMISSION
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PETERS SHORTHAND REPORTING CORPORATION (916) 362-2345

COMMITTEE MEMBERS PRESENT

Robert A. Laurie, Commissioner, Presiding Member

Robert Pernell, Commissioner, Associate Member

John Wilson, Commissioner Advisor

Laurie ten Hope, Commissioner Advisor

STAFF PRESENT

John Sugar, Program Manager

Scott Matthews, Deputy Director

Dave Abelson

Kae Lewis

Mike Sloss

Mike Messenger

Gary Cullen

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I N D E X

	Page
Proceedings	1
Project Overview	2
Opening Comments	6
Open Discussion	10
Rich Ferguson Sierra Club	10
Lisa Wood City of San Diego	22
Michael Parti Applied Econometrics	34
Ed Vine University of California	38
Don Link CALEP	48
William Nelson Residential Energy Efficiency Clearinghouse	63
Dan Lieberman City of San Jose	79
Lunch Break	
Afternoon Session	88
Open Discussion (Continued)	
Steve Schiller Schiller Associates	88
Guy Nelson Utility Energy Forum	100
Tyler Bradshaw FAFCO, Thermal Energy Storage Technical Committee	102

I N D E X

	Page
Open Discussion (Continued)	
Mark Berman Davis Energy Group	106
Loren Lutzenhiser Washington State University	113
Nicole Biggart University of California, Davis	139
Richard Sperberg Onsite Sycom Energy Corp., NAESCO	144
Peter Miller Natural Resources Defense Council	153
Tony Dunn Sierra Energy Center	164
Chris Chouteau PG&E	173
Dale Gustavson Energy Efficiency Consultant Penton Media	179
William Nelson Residential Energy Efficiency Clearinghouse	184
Rich Ferguson Sierra Club	187
Lisa Wood City of San Diego	194
Steve Schiller Schiller Associates	196
Tony Dunn Sierra Energy Center	198

I N D E X

	Page
Workshop Summary - Next Steps	199
Closing Statements	207
Adjournment	209
Reporter's Certificate	210

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1 P R O C E E D I N G S

2 PRESIDING MEMBER LAURIE: Welcome. If
3 you could all take your seats, please.

4 Good morning. My name is Robert Laurie,
5 Commissioner at the Energy Commission, Presiding
6 Member of the Efficiency Committee, which is
7 administering the preparation of the Transition
8 and Operations Report mandated pursuant to 1105.

9 To my left is Commissioner Robert
10 Pernell, my associate on the Committee.

11 COMMISSIONER PERNELL: Good morning.

12 PRESIDING MEMBER LAURIE: To
13 Commissioner Pernell's left is Commissioner
14 Pernell's Advisor, Laurie ten Hope. To my right
15 is my Senior Advisor, John Wilson.

16 In a moment -- well, let me do it at
17 this time. The Program Manager for the
18 preparation of the report is Mr. John Sugar. It
19 will be Mr. Sugar's responsibility to coordinate
20 the efforts of his team, and for continued
21 introductory purposes, at this time I'd like to
22 have Mr. Sugar introduce his associates on the
23 team that's responsible for the preparation of
24 that report.

25 PROGRAM MANAGER SUGAR: Thank you,

1 Commissioner.

2 If I could introduce from the far left,
3 we have David Abelson, who is the staff attorney
4 assisting us on the project. Gary Cullen, next to
5 Dave, is responsible for the work -- should we get
6 all the microphones set up -- we're having some
7 microphone issues, I'll get to that in just a
8 moment or two. Thank you.

9 Gary is responsible for the work that
10 we're doing in estimating the potential for future
11 energy efficiency.

12 Next to Gary is Scott Matthews, who is
13 Division Chief for Efficiency, my supervisor.
14 Laurie ten Hope, Commissioner Pernell,
15 Commissioner Laurie, John Wilson, Mike Sloss,
16 who's responsible for the team working on the
17 administrative structure for future efficiency
18 programs, and Kae Lewis, who is working with the
19 team, heading up the team, looking at issues of
20 program characteristics and design for market
21 transformation.

22 If I could very briefly go through the
23 direction which we have received from the
24 Legislature in AB 1105. This is the first of a
25 series of Committee workshops on the Commission's

1 Public Energy Efficiency Public Goods Charge
2 Report.

3 In June, the Legislature approved, the
4 Governor signed AB 1105, and that directs the
5 Commission to complete two reports. The first is
6 a Transition Plan Report on the Transfer of Energy
7 Efficiency Programs from the Public Utilities
8 Commission to the Energy Commission, by the end of
9 2001. The report is to consider a number of
10 aspects of that, including issues related to
11 oversight responsibility; issues associated with
12 the transfer of administration from Utilities to a
13 new administrative structure; coordination with
14 other Public Goods Charge programs; ensuring that
15 current programs apply market transformation
16 principles and result in sustainable improvements
17 in efficiency markets; and the resources necessary
18 to implement a transition plan.

19 The second report which the Legislature
20 directs us to prepare is an Operational Plan
21 Report, to recommend an efficient and effective
22 post-transition administrative structure for
23 efficiency programs. And this report is to
24 consider application of market transformation
25 principles for cost effective sustainable

1 improvements; include assessment of energy markets
2 untapped opportunities for cost effective savings;
3 programs that result in sustainable improvements
4 in the information environment, market rules and
5 structure to help private businesses innovate and
6 help consumers make more intelligent energy
7 choices.

8 The report is to include consideration
9 of the appropriate role of other entities, public
10 and private, including -- in energy efficiency
11 services, including designating a public benefit
12 non-profit corporation as the program
13 administrator. We need to consider whether
14 funding eligibility should extend to supporting
15 consumers shifting electricity usage in response
16 to pricing differences; the appropriate funding
17 levels for energy efficiency after 2001;
18 minimizing the role of state agencies in providing
19 administrative and implementation services; and
20 consider programs in existing markets that reduce
21 consumer energy bills while stimulating the growth
22 of competitive industry, such as standard
23 performance program contract programs.

24 The Energy Commission is to have these
25 reports completed by January 1. In order for the

1 Efficiency Committee, who you see here, and the
2 Commission to complete its review of staff's work,
3 staff has to complete its work by the end of
4 November.

5 Today's workshop is the first of what
6 will be a series. The goal today is to hear from
7 parties regarding issues they believe the
8 Commission should address in the reports, and
9 considerations that parties believe the Commission
10 should take into account.

11 The agenda is quite broad, and that's
12 purposeful, to ensure that we hear all relevant
13 comments. We do ask that comments, where
14 possible, be brief to ensure that everyone has an
15 opportunity to speak today. We were trying to set
16 up some roving microphones, and we may yet succeed
17 if the building manager comes and helps us get the
18 other sound system going. Given that at the
19 moment we're running into technical difficulties,
20 we ask that to make your comments, you please come
21 up to the podium. Hopefully we'll have a better
22 system in place shortly.

23 We're happy to receive written comments.
24 If you do have written comments, either from the
25 discussion here or written comments that you have

1 prepared already, if you could submit them
2 electronically that will help us get them onto our
3 list server.

4 In personal details, there are
5 restrooms. If you go outside, in the main hall
6 there's a door market restrooms, and stairs, which
7 is code for restrooms and stairs.

8 (Laughter.)

9 PROGRAM MANAGER SUGAR: There also are
10 pay phones, and on the second floor there is a
11 cafeteria.

12 With that -- and Mike Messenger is just
13 coming in, he'll also be up here. Mike was
14 responsible for the team looking at the need for
15 efficiency programs, which is a result of the
16 comments the Governor had in his veto message --
17 where he didn't veto this effort, by the way --
18 and future program magnitude, which is one of the
19 issues which we need to address.

20 PRESIDING MEMBER LAURIE: Thank you,
21 John.

22 As Mr. Sugar indicated, there will be
23 additional workshops. The intent of this workshop
24 is to receive as general or as specific comments
25 as you may desire to offer. As time goes on,

1 there will obviously be something a lot more
2 specific for you to comment to. At this point in
3 time, although there may be conceptual bogs and
4 conceptual ideas floating around, not only in your
5 own organization, certainly our organization as
6 well, nothing is close to being put on paper yet.
7 Therefore, we have nothing to give you for you to
8 respond to because, in fact, that would be
9 premature.

10 We're interested in your thoughts as to
11 both process, if you desire, or specifics in
12 regards to any of these chapters, or portions of
13 the report that are to be mandated.

14 The meeting is being recorded and
15 transcribed. If there is a problem with that, we
16 will be informed and we will hold you up
17 momentarily.

18 There is no formal structure. That is,
19 if you desire to speak we would ask that you fill
20 out blue cards and get them submitted up front.
21 If you don't do that, don't worry about it. We'll
22 get you anyway. We anticipate no problem in
23 hearing everybody's concerns once or twice, it may
24 be necessary.

25 We would ask that you be reasonable

1 about the length of your comments. If you're
2 going to submit a paper, don't read your paper
3 today, please. Submit your paper. We would ask
4 you to be courteous, and hold your comments to a
5 relatively limited period of time. If there's a
6 problem with that, then we will engage in that
7 discussion.

8 Towards the end of the meeting we will
9 talk a little further about our process. We
10 believe process is absolute key to a successful
11 outcome. Again, although we may have some of our
12 -- our ideas, we do not have solutions. We all
13 have solutions, and your input into that process
14 is critical.

15 Commissioner Pernell, did you have any
16 opening comments this morning?

17 COMMISSIONER PERNELL: Yes. What I'd
18 like to do is welcome everyone. And we have, as
19 Commissioner Laurie has said, a mandate from the
20 Legislature, AB 1105, to do a report. And we
21 intend to do that. We intend to do that with
22 everyone's input. And you can't just assume that
23 we know what you're thinking, so I would ask that
24 regardless of how you consider -- how you consider
25 it will be received, just say it. Otherwise, we

1 won't get it, we won't have it on tape.

2 We will complete the legislative mandate
3 in a timely manner, so we just ask, as
4 Commissioner Laurie has said, that you be
5 courteous of others in your -- in your statements,
6 and not take up, you know, two hours to explain
7 why you think the sky might fall.

8 So with that, again, thank you for being
9 here and helping us through this process, and we
10 do intend to hear everyone's comments and consider
11 them.

12 PRESIDING MEMBER LAURIE: Thank you, Mr.
13 Pernell.

14 Ladies and gentlemen, it is going to be
15 very hot in Sacramento today. Hopefully, this
16 auditorium will adjust to that, but do not be
17 concerned if towards the end of the afternoon you
18 feel a desperate need to remove whatever you need
19 to remove, and feel free to do that.

20 (Laughter.)

21 PRESIDING MEMBER LAURIE: Within legal
22 boundaries, please.

23 Mr. Sugar, did you want to at this point
24 have team members offer opening comments, or was
25 it your intent to go immediately to the audience

1 for public input?

2 PROGRAM MANAGER SUGAR: We were thinking
3 of going immediately to the audience for public
4 input.

5 PRESIDING MEMBER LAURIE: Okay. We do
6 have all of the team leads here today. And by
7 that, I mean there have been individuals assigned
8 that you've been introduced to, that will be
9 primarily responsible for certain portions of the
10 report.

11 We don't have -- we don't have copies of
12 1105 here, do we? I'm assuming you're all
13 familiar with that, since that legislation is our
14 mandate, and I -- I can assure you we will be
15 following the letter of that mandate.

16 At this point, therefore, let me open
17 the matter up for public comment. I will first go
18 through the blue cards. After that, I will open
19 it up for other individuals.

20 Rich Ferguson, please.

21 MR. FERGUSON: Good morning,
22 Commissioners and staff.

23 I just finished these comments a few
24 minutes ago. I have not had time to file them
25 electronically. I apologize, I'll do that at the

1 earliest opportunity.

2 I'm here representing the Sierra Club.

3 I'm the Energy Chair of Sierra Club in California,
4 and we strongly support the move to transfer the
5 authority for the public funded energy efficiency
6 programs to the Energy Commission, assuming, of
7 course, that you take my advice on how they should
8 be administered.

9 (Laughter.)

10 MR. FERGUSON: The first question I hope
11 we can dispense with fairly quickly, and that's
12 whether these programs should be continued at all.
13 I know that was one of the questions.

14 There has been a considerable amount of
15 work, including some by my office, this year on
16 the public value of -- of load reductions. I gave
17 a presentation to a workshop at the Public
18 Utilities Commission a month or so ago, which I
19 know many in the audience have seen. There was
20 also an article which appeared this month in the
21 Electricity Journal, which has a lot of these
22 details. If there's an interest in going into
23 this in more detail, perhaps this afternoon, I did
24 bring overheads, I can put those graphs. This is
25 in Attachment A of the comments.

1 But just very quickly. In today's
2 electricity markets, the higher the demand, the
3 higher the prices, the lower demand, the lower the
4 prices. And, in fact, those lower prices are
5 passed along to everybody buying power in the
6 energy market.

7 And it's possible to arrive at some
8 proxy supply curves. And from those supply
9 curves, one can figure out the value in terms of
10 the reduced prices to everybody in the market of a
11 megawatt hour of load reduction at any hour in
12 which the market is open.

13 We have done that for the first 12
14 months of the market using prices at the
15 California Power Exchange to estimate the public
16 value of load reduction, which are quite striking.
17 The estimate that we made is in excess of \$600,000
18 per baseload megawatt reduction for one year. In
19 other words, an average megawatt year saves
20 everybody else in the market that much money. In
21 kilowatt hour terms, that's about seven and a half
22 cents per kilowatt hour.

23 These estimates were made using
24 regression analysis on the market data. A few
25 months ago, the California Power Exchange began

1 releasing anonymous bid data, so it's possible now
2 to see the individual bids that are coming into
3 the Power Exchange. And from where the market
4 clearing price occurs on those bid curves, it's
5 possible to do this calculation a lot more
6 accurately. Unfortunately, it involves
7 considerably more data and work, but one does
8 arrive at a more reliable figure.

9 I would strongly suggest that the
10 Commission, as part of its work, undertake that
11 analysis. It is being looked at at Stanford and
12 the University of California, and they could
13 surely use your help. The number is striking.
14 There is considerable public value to reducing
15 load in the system, and therefore these publicly
16 funded programs should be continued.

17 There's been a lot of talk about the
18 value of load shifting, and one of the questions
19 that was asked by the Legislature in AB 1105 was
20 whether or not some of this -- these programs
21 should be designed to encourage load shifting.
22 Our recommendation is not to do so at the present
23 time, for a variety of reasons. One is that the
24 markets are just now in San Diego beginning to see
25 real time prices and price volatility, and it's

1 expected, at least, that consumers will respond to
2 those price signals and begin to shift load
3 automatically, and that energy service providers
4 will -- will pursue that market niche.

5 So we feel that it's inappropriate to
6 try and subsidize this fledgling market at the
7 current time until we have some idea of how the
8 markets are going to respond.

9 Computationally, there are problems,
10 because the load shift doesn't just take load out
11 of the system, it takes it here and puts it back
12 in another hour. So to figure out the public
13 value, you have to not only figure out the value
14 of reducing load in one hour but of increasing
15 load in the other hour, and net those two things
16 out.

17 In addition, there are some
18 environmental considerations, because, for
19 example, if one reduces peak and increases
20 baseload, you might be increasing the amount of
21 coal-fired production that's coming into the
22 system which has perhaps more environmental
23 concerns than the peakers that -- that you're
24 displacing.

25 So those are our comments on the first

1 question.

2 The second question has to do with the
3 administration. And all I can say is this is our
4 opportunity, when -- when the programs are moved,
5 to try and maximize the competitive market to
6 design and implement programs. In the past, there
7 has been a great deal of what I would call
8 micromanagement by program administrators,
9 designs, sizes, they're carved up by utility
10 territories, and so on. And we just feel strongly
11 that if the programs are left to the private
12 sector to design them as cost effectively as they
13 possibly can, we'll get a lot more reduction in
14 load per dollar, which is our goal.

15 So as the staff thinks about this, I
16 have to encourage you to try to minimize the
17 state's role in figuring out what the best things
18 to do are to -- to get these load reductions, and
19 try to maximize reliance on the private sector,
20 the companies or for profit institutions that are
21 actually going to go out and -- and change the
22 infrastructure on the demand side to reduce load.

23 The -- as far as how these things should
24 be administered, we think the proper model is the
25 way the Commission administered the new renewables

1 program through a competitive auction. Basically
2 you say we've got so much money, we're going to
3 buy renewable kilowatts, or in this case load
4 reduction kilowatt hours, and we want to do that
5 as cheaply as possible. Make me an offer, and
6 we'll award the money on a least cost basis, and
7 work our way out.

8 We think that worked very well. It's
9 gotten world-wide acclaim. It won't be as easy
10 for load reductions, of course. It's much harder
11 to figure out how much load reduction any
12 particular measure is going to achieve, how
13 lasting those savings are, and a variety of issues
14 like that. However, these have been done by
15 various entities, utilities and others around the
16 country, for years and years. It is not an
17 impossible task.

18 We suggest, however, that the
19 administration of the resulting contracts that
20 come out of this competitive procurement be
21 handled by a non-profit statewide, state chartered
22 entity similar to the system operator, and/or the
23 California Power Exchange, under the oversight of
24 the Electricity Oversight Board. And depending on
25 what happens in the Legislature in the next year

1 or so, this would make especial sense if the
2 oversight board becomes a division of this
3 Commission, or a successor entity, whoever that
4 is.

5 But we think that model has worked well.
6 And we suggest that you include that as -- as your
7 top administrative scenario in your report.

8 There are a bunch of transition issues
9 related to the timing of when this new entity
10 would have to -- have to begin to staff up and
11 design its bylaws, organize its board, and so on,
12 just like the ISO and the Cal PX did. This is an
13 enormously simpler task, because the reliability
14 of the grid does not depend on these programs.

15 At any rate, that's a quick summary of
16 my comments here. I've tried to be responsive
17 both to your questions and to the issues raised in
18 AB 1105. Anyway, I'm happy to answer any
19 questions you might have, and we look forward to
20 working in this process for the next several
21 months.

22 PRESIDING MEMBER LAURIE: Thank you, Mr.
23 Ferguson.

24 Any questions of Mr. Ferguson at this
25 point?

1 Thank you, Rich.

2 Mr. Matteson. Gary.

3 MR. CULLEN: Commissioner, I'm seeking
4 some clarification. Would you like us to hold our
5 questions until the end of the entire public
6 process, or ask questions --

7 PRESIDING MEMBER LAURIE: No. If you
8 have questions of a specific speaker, then I would
9 encourage you to ask them while they're at the
10 podium.

11 Did you have a question of Mr. Ferguson?

12 MR. CULLEN: I do.

13 PRESIDING MEMBER LAURIE: I'm sorry.

14 Mr. Ferguson.

15 MR. CULLEN: I was just wondering, in
16 terms -- I'm interested in exploring your idea of
17 a state chartered non-profit corporation to
18 administer the program.

19 My question is, do you have any thoughts
20 or recommendations on how the contracting would go
21 under that arrangement, how the money should flow
22 from UDCs who collect these funds; should it go
23 through the Electricity Oversight Board, or
24 directly to the non-profit, or have you thought
25 about the details of that?

1 MR. FERGUSON: Yeah, I do have a
2 comment. And, of course, these are collected by
3 UDCs, but they are paid by all customers whether
4 they're customers of the UDC or not. And we
5 believe it's not at all inconceivable that some
6 municipal utilities would want to join this. And
7 the way -- the way we see it is that -- is that
8 collections come in, they're deposited in some
9 sort of account by the Public Utilities
10 Commission, which the new entity can draw on. And
11 funding levels and so on, we would recommend, you
12 know, maintaining the current program levels for
13 some definite time in the future so that the new
14 entity can be established and have some certainty,
15 as they say.

16 But that's how we see it, is that the
17 transfer is basically just a financial one inside
18 some account.

19 MR. CULLEN: So there's no contract. It
20 would simply be --

21 MR. FERGUSON: With the new entity?

22 MR. CULLEN: -- these are your -- yeah,
23 with the new --

24 MR. FERGUSON: No. The contracts would
25 be with the new entity and the program

1 implementers.

2 MR. CULLEN: Okay. One other quick
3 question.

4 MR. FERGUSON: And that's similar to the
5 way the ISO operates too, is my understanding.

6 MR. CULLEN: Okay. I'm interested in
7 trying to understand your analysis of the public
8 value, because I'm the team lead on this and I
9 need to make sure I understand this.

10 And maybe -- if you want to give me more
11 details later, at a future workshop, that's fine.
12 But could you talk to me a little bit about how
13 the public -- how you get the difference between
14 the public value of 7.5 cents and the private
15 value of 2.5 cents. Is that related to the fact
16 that not all customers are paying prices on the
17 margin that are exactly equivalent to the cost,
18 or?

19 MR. FERGUSON: No. It has to do with
20 the fact that how many -- how many megawatt hours
21 are being sold in the system matters. That, I
22 mean, if you look at those supply curves, the
23 slope of the supply curve may be a few mils per
24 megawatt hour, but you may have 20 or 30,000
25 megawatt hours or more being sold in that period

1 of time. So that, you know, the few mils that
2 come off the price of a megawatt hour get
3 multiplied out by however much power there is in
4 the market, so in a way there's kind of leverage
5 by all the other people in the market. And so
6 when you multiply that out, the savings in any one
7 hour, especially if the curve gets very steep, are
8 quite significant.

9 We -- we can go through it, and I'm
10 happy to give my spreadsheets and --

11 MR. CULLEN: Sounds like we should do
12 that.

13 MR. FERGUSON: -- we can work that.

14 MR. CULLEN: Thank you.

15 MR. FERGUSON: But the point is that in
16 the spring, the Power Exchange began releasing the
17 actual bid data from which they construct the
18 supply curve to find the market clearing price in
19 every hour. I mean, there's -- instead of just
20 one price at one quantity for a market clearing
21 price that we used, you've got I don't know how
22 many bids, hundred bids, you know, every hour.
23 And the thinking of the economists on this, it
24 would be possible to actually use the actual bids
25 and find the slope at the market clearing price in

1 every hour on the supply bids.

2 I've talked to Power Exchange staff
3 about this, and they indicate that the proxy
4 curves are not bad. But it's possible to do that
5 if you've got some spare computer time.

6 MR. CULLEN: Thank you very much.

7 PRESIDING MEMBER LAURIE: Thank you, Mr.
8 Ferguson.

9 Gary Matteson, from UC?

10 Lisa Wood, please?

11 MS. WOOD: Good morning. I'm Lisa Wood.

12 I'm here from the City of San Diego, and I'll
13 follow in the same mode as the gentleman from the
14 Sierra Club. I'll talk first about the program,
15 and then about the administration of the program.

16 Very briefly, the importance of the
17 continued funding of the program is a no-brainer.
18 Environmental issues are paramount, and energy use
19 is probably the single biggest contributor to
20 environmental destruction of any other aspect of
21 our lives. So in terms of when you're talking
22 about the magnitude of continued funding, I would
23 urge from an environmental perspective that it
24 should be kept at as significant a funding level
25 as possible.

1 From our perspective, of course, there's
2 an importance of local control of funds. Local
3 governments are close to the users. We can be
4 involved in the distribution of funds. We can
5 identify needs. Local governments, from our
6 perspective, should be encouraged to take a
7 greater role in energy conservation efforts.
8 Agenda 21 issues come to the forefront. In other
9 nations, local governments have taken a much
10 stronger role in environmental issues, and I think
11 it's very important in California that we do so
12 here, as well.

13 State and local governments should lead
14 by example. And we can do that if we're more
15 involved in these programs.

16 I'd like to also stress the importance
17 of demonstration projects. And again, this is a
18 place where state and local governments can take
19 the lead. In the City of San Diego, we have a
20 demonstration project, Ridgehaven Green Building,
21 which you may have heard of, and I think these
22 kinds of programs are extremely important.

23 Also, I've been talking with a few
24 people who are involved in this issue, and I
25 understand that bang for the buck is a very

1 important issue. And when you're talking about
2 big corporations and what they can achieve in
3 terms of actual kilowatt hours saved, you're
4 talking about significant savings, and again, that
5 rolls into very effective protection for the
6 environment when you're going for the big bang for
7 the buck.

8 But that's not the only issue. And I
9 think there are under-served communities out
10 there. I think there are under-served communities
11 that may need extra incentives to realize the
12 savings that you can get from energy conservation
13 programs. So I would emphasize a focus on looking
14 both at bang for the buck and at serving under-
15 served communities.

16 Okay. So that's about the program
17 itself. With regard to the administration of the
18 program, from our perspective, obviously it's very
19 important that red tape is minimized. And I
20 think, again, that I'm just repeating what the
21 Sierra Club representative said, avoiding micro-
22 management is very important. On the other hand,
23 detailed technical assistance, the other side of
24 that, can be very effective. So when you're
25 looking at, you know, where to put the emphasis,

1 it's not a micro-management, but it is on detailed
2 assistance.

3 The program should be administered as
4 creatively as -- with as much flexibility, and
5 with an idea to being very clever about this.
6 There are clever ways to realize energy savings.
7 From our perspective, the CEC is in a good
8 position to understand and influence and take
9 advantage of things like rate structure, and
10 assistance to the people that would be receiving
11 the incentives.

12 In addition with the issues of
13 administration, the issues mentioned above, such
14 as the importance of continuing the funding, the
15 importance of local control, all of these things
16 should be addressed. And from a local
17 perspective, we would obviously like the ability
18 to influence the distribution of the funds if the
19 program seems not to be addressing locally
20 perceived needs.

21 And I don't have written comments, but I
22 can provide them at a later date if they would be
23 useful.

24 Any questions?

25 PRESIDING MEMBER LAURIE: Thank you, Ms.

1 Wood.

2 Any questions for San Diego?

3 Commissioner Pernell.

4 COMMISSIONER PERNELL: Ms. Wood, can you
5 give me an example of local control, local
6 entities working with the overall program?

7 MS. WOOD: An existing example?

8 COMMISSIONER PERNELL: Any example.

9 MS. WOOD: Okay. I'm new to energy
10 conservation. I got put on this in January. And
11 in our department, for the City of San Diego, we
12 have I think one of the better programs that's
13 available locally.

14 We have the Ridgehaven Building, which
15 is a demonstration Green Building. It was the
16 first building in the nation to receive the Energy
17 Star award. And as part of our outreach to the
18 community in that building, we have a public
19 library that is open to the public, and it
20 emphasizes environmental literature. It's
21 specifically an environmental library. And people
22 coming in to use that library, they not only
23 receive the benefits of the local library, but
24 they're also exposed to the Green Building and the
25 displays that we have in the Green Building

1 promoting energy conservation, water conservation,
2 indoor air quality, and other environmental
3 issues.

4 Our department also deals a lot with
5 waste reduction, and of course that's a big focus,
6 and there are a lot of displays on that, as well.

7 In addition, our conference facilities
8 that are available, first to our department but
9 also to people outside the department, bring
10 people through the building so that they have an
11 opportunity to see the displays. And we receive
12 visits from members of the community and from
13 people all over the world. We've had dozens of
14 countries come and visit our building to see what
15 it is we're accomplishing in terms of energy
16 reduction.

17 So that's one way that -- through our
18 demonstration building, that we've provided quite
19 a bit of outreach to the community.

20 We also, because we're involved in waste
21 reduction and other environmental issues, we have
22 a number of opportunities to provide outreach to
23 people that we do do.

24 In addition, because we -- because I
25 work within the city, and I previously worked in

1 -- let's see, I've been with the Environmental
2 Services Department for ten years, but I
3 previously worked in the Planning Department, so
4 I've been working with the planners on outreach to
5 the public. Some easy steps we took, for example,
6 were when people were building -- getting
7 construction and demolition debris permits. They
8 were initially directed to our landfill. Now, we
9 direct them to do recycling. To the recycling --
10 the private recycling centers throughout the city.

11 We're working with the permit planners
12 to incorporate not only waste reduction measures,
13 but also sustainable development measure, and
14 including energy reduction. We want to be, again,
15 doing this on strictly a voluntary basis, at least
16 initially, similar to programs in Santa Barbara
17 County and in Phoenix, Arizona, where with each
18 permit applicant that comes through the door we
19 have an opportunity then to talk to them about how
20 to incorporate these materials, these ideas, these
21 concepts, into each and every project, whether
22 it's a new building or it's a permit for some kind
23 of a modification to an existing building. It's
24 an opportunity for us to talk about sustainable
25 development issues with them at that point, as

1 well.

2 So we're working on that. We're also
3 doing internal programs, just with various city
4 departments. But, of course, each city department
5 has outreach to the public, as well.

6 So I'm not sure if I'm -- I'm kind of
7 rambling on here. I'm not sure if I'm answering
8 your question, but we certainly are face to face
9 with the public, and there are a lot of
10 opportunities.

11 COMMISSIONER PERNELL: Well, I think you
12 -- you did a good job there. I guess what I'm
13 getting out of that is a heightened educational
14 program centered around energy efficiency, as well
15 as possible some local ordinances as it relates to
16 the permitting process.

17 MS. WOOD: Right. We're -- yeah, we're
18 working through the permitting processes, as well
19 as informational campaigns. In our department we
20 have two full-time public information officers
21 that are dedicated to various environmental
22 issues.

23 COMMISSIONER PERNELL: Thank you.

24 MS. WOOD: Okay. Thank you.

25 PRESIDING MEMBER LAURIE: Any other

1 questions of San Diego? Yes.

2 MS. LEWIS: I have a question. You
3 talked about under-served communities. What
4 groups do you have in mind?

5 MS. WOOD: Well, what I'd -- what I'd
6 like to see, for example, in our -- in our
7 department, again, we have a grant from the
8 International Council for Local Environmental
9 Initiatives, and we have some programs through
10 them. And part of that program is the climate
11 wise program. We were supposed to have partners
12 and bring those partners on board to have energy
13 reduction goals and action plans. And the focus
14 so far seems to me to have been kind of the no-
15 brainers, the Hewlett Packards and the QualComs.
16 And those are -- those are organizations, those
17 are companies that have very sophisticated energy
18 conservation programs already.

19 And so where I would like to see our
20 climate wise program go, and also additional grant
21 funding if we're able to achieve it, is more
22 toward businesses that may not be as well hooked
23 in to the informational side of things, that may
24 need a little bit more up front, incentive or
25 education to get going.

1 For example, our Barrio Logan Community
2 has a large commercial industrial area. They're
3 small businesses, they're usually not national
4 businesses, they're often local businesses. Many
5 times they're run by people who have English as a
6 second language. And I think there's an
7 opportunity where we're on the ground, we're
8 working with those communities anyway. There are
9 non-governmental organizations in our community
10 that have outreach to those communities, and we
11 could partner up with those NGOs and with our
12 existing community outreach, I think, to very
13 effectively bring the message to those kinds of
14 communities.

15 Also, of course, there's an opportunity.
16 We have RMDZs in our area, Recycling Manufacturing
17 Development Zones, and again, those areas are
18 receiving assistance, but they're receiving
19 assistance from the waste management end. And
20 they tend, again, not to be big national
21 corporations that are already hooked in to ideas
22 about ISO and that kind of thing.

23 PRESIDING MEMBER LAURIE: Mr. Messenger.

24 MR. MESSENGER: One other quick
25 question. In terms of the way that the money

1 might come to you, let's assume that we have set
2 up a system where the City of San Diego was going
3 to receive money. Would you prefer that the money
4 come from some statewide administrator, like the
5 non-profit corporation in Mr. Ferguson's example?
6 Or does the city have a preference working with,
7 you know, maybe a market specific administrator
8 who would be for profit or non-profit, and you
9 could apply for, you know, a residential type of a
10 demonstration, or commercial, or -- do you have
11 any ideas about who do you think you could work
12 better with? Because that's one of the things we
13 have to grapple with, is statewide versus
14 regional, that type of thing.

15 MS. WOOD: Right. Right. Well, again,
16 I've been with this program only since January.
17 Most of my experience has been dealing with
18 environmental regulatory agencies, Fish and Game
19 and the Integrated Waste Management Board, and
20 also on the national level, Fish and Wildlife and
21 the Corps of Engineers, that kind of thing. And
22 what I find is when there are local boards, for
23 example, the Air Pollution Control District or the
24 Regional Water Quality Control Board, when you
25 have people locally, they understand your local

1 needs.

2 So obviously, if there are
3 administrators in a local area, we have a local
4 assistance person that we work with from the
5 Integrated Waste Management Board, that's far
6 better than working with somebody who's in
7 Sacramento and has never even to San Diego. So in
8 terms of that, that's my experience.

9 I'm not saying, you know, I'm not saying
10 how you should organize it, but, you know. And
11 also, most of my experience has been dealing with
12 government agencies, most of the grant funding
13 that we have already for our energy program comes
14 -- even the ICLEI grant, the International Council
15 for Local Environmental Initiatives, is a non-
16 profit organization, but their funding comes from
17 DOE and EPA, and they -- so it's -- that also is
18 government funding, and it comes specifically to
19 local government agencies.

20 So my experience, and my comfort zone is
21 with government agencies.

22 DEPUTY DIRECTOR MATTHEWS: Just an
23 observation. We're going to be struggling with
24 what the role of local governments should be, and
25 I invite you to continue to participate. And we

1 need to -- we need to get some clarity on -- on
2 what those roles and relationships ought to be.
3 And I think it's a challenge for us to figure out
4 how to best work together.

5 I did see Mr. Raymer jump up excitedly
6 when Commissioner Pernell asked his question. I
7 don't know if you want to take him next, or let
8 him respond to the question.

9 PRESIDING MEMBER LAURIE: The answer is
10 no.

11 (Laughter.)

12 PRESIDING MEMBER LAURIE: Thank you.

13 Michael Parti.

14 MR. PARTI: Good morning.

15 PRESIDING MEMBER LAURIE: And ladies and
16 gentlemen, when you come to the podium, could you
17 again say your name and your organization, please.

18 MR. PARTI: Sure. I'm Michael Parti,
19 and I represent Applied Econometrics. We are a
20 firm that does evaluations of conservation
21 programs and forecasting, and other things that
22 are related to those things.

23 And those are -- those are really the
24 sorts of issues I'd like to address this morning.
25 I only have a few very short points to make. I

1 will, however, be filing a general plan that you
2 can use for -- that'll have some suggestions for
3 how to structure market transformation planning
4 and evaluation, but I don't have that with me
5 today.

6 I think we have -- the first point that
7 I'd really like to address is that I think we have
8 a marvelous opportunity to use the experience that
9 we've had in California for the past few years in
10 evaluating programs, as a guide for the future.
11 To a certain extent, I think that the protocol,
12 the California protocols, for example, that we've
13 had, have worked out very successfully. And there
14 have, however, been a few -- a few rough spots.
15 And I think it probably would be worthwhile for
16 the Commission to do a process evaluation of the
17 protocol process to find out what worked and what
18 didn't work.

19 My second point is that the evaluation
20 process, as we had it before, gave some lip
21 service to the idea of a structure of feedback and
22 control loops. That is, you, in a feedback and
23 control loop set up for evaluation what you do, is
24 you have a first cut at what looks like a sensible
25 program. Then you monitor the program, and you

1 find out what parts work and what parts didn't
2 work. And then you try to fix the parts that
3 don't work to see if you can make a viable
4 program.

5 By and large, what we've had up to now
6 are programs that are either yea or nay. So if
7 the evaluation comes out good, then the program
8 may continue, and if it doesn't come out good, it
9 doesn't continue. But I think it's worthwhile. I
10 think a lot of good programs can very easily bite
11 the dust in a -- in a setting like that.

12 Now, as to -- one more point. As to the
13 administrator, the administrative entity. I don't
14 -- I don't have any I think very hard and fast
15 ideas yet. I think there are a couple of
16 properties, though, that we would like to have
17 this administrator to have. And one is that the
18 administrator should be -- first of all, the
19 administrator should be independent. That is, it
20 should have no incentive to inflate or deflate the
21 value of any program. And I think part of the
22 problem we've had in the past is that there was
23 always such a -- there were always large economic
24 incentives to proving a program worked or didn't
25 work, so I think the program administrator, at

1 least, should be independent of that.

2 And in addition to that, I think we need
3 a further, even stronger test. I think it would
4 be appropriate that the administrator should have
5 no incentive to promote or interfere with the
6 profitability of any of the ESPs in the market.

7 Okay. Those are all my ideas.

8 DEPUTY DIRECTOR MATTHEWS: You may want
9 to use the words instead of the acronyms, that ESP
10 is Energy Service Provider.

11 MR. PARTI: Oh, okay. Any of the --

12 DEPUTY DIRECTOR MATTHEWS: Not
13 everybody's familiar with all the -- all of our
14 terms.

15 MR. PARTI: Yes. Any of the -- any of
16 the market retailers.

17 PRESIDING MEMBER LAURIE: Thank you, Mr.
18 Parti.

19 Any questions?

20 Thank you, sir, very much.

21 MR. PARTI: Sure.

22 PRESIDING MEMBER LAURIE: Ed Vine?
23 University of California.

24 Are you here with Mr. Matteson? No? Is
25 Gary Matteson here yet? He had submitted a card.

1 MR. VINE: My name is Ed Vine. I'm
2 representing the University of California on a few
3 issues. There may be other representatives of the
4 University of California who may appear later to
5 discuss other issues.

6 PRESIDING MEMBER LAURIE: And what is
7 the likelihood that your views are going to be
8 consistent?

9 (Laughter.)

10 MR. VINE: I think we'll have to find
11 out.

12 I do have some specific issues I want to
13 address, and I do have something that I prepared,
14 but I'm going to amend and then submit later,
15 after my presentation.

16 And the key issues deal with the
17 infrastructure that may evolve over time, and they
18 deal with two issues related to emerging
19 technologies and to market transformation.

20 We've been participating in other forums
21 with the California Public Utilities Commission,
22 as well as the California Board for Energy
23 Efficiency, and trying to highlight the importance
24 of what we call emerging technologies. And in
25 this context, we define emerging technologies to

1 include measures that are not yet commercialized
2 but are likely to be commercialized and cost
3 effective to a significant proportion of end users
4 in the next five to seven years, or they're
5 commercialized, but currently have penetrated less
6 than five percent of the appropriate market.

7 And this is based on work that has been
8 done recently in a study by the American Council
9 for an Energy Efficient Economy and the Davis
10 Energy Group, in a report entitled "Emerging
11 Energy Saving Technologies and Practices for the
12 Building Sector". This study was done for the
13 country as a whole, and not for California, so
14 immediately I would suggest that in the near term,
15 whenever -- however you define the near term, the
16 Energy Commission and others try to look at
17 emerging technologies from a California
18 perspective. There's probably going to be a lot
19 of overlap between what was done in this, in the
20 ACEEE study and the California study, but there
21 might be some unique technologies and services for
22 California.

23 The University of California believes
24 the -- the Energy Commission should establish a
25 formal process for developing an integrated

1 systematic and strategic approach to emerging
2 technologies, particularly as they relate to
3 market transformation programs. We feel that the
4 Energy Commission should initiate development of a
5 statewide strategic plan for emerging energy
6 efficiency technologies that draws on the
7 resources of the interested stakeholders,
8 including the California Public Utilities
9 Commission, the California Board for Energy
10 Efficiency, California utilities and the Energy
11 Commission. Without such an approach, significant
12 lost opportunities will occur, resulting in the
13 loss of significant energy and cost savings to the
14 California ratepayers.

15 The Energy Commission should also
16 utilize the resources of the University of
17 California's California Institute for Energy
18 Efficiency, CIEE, in developing a strategic plan
19 for emerging technologies. The CIEE is uniquely
20 situated to provide assistance, as its mission is
21 to plan and manage a statewide program of research
22 and technology development aimed at advancing end
23 use energy efficiency and productivity in
24 California.

25 In my preparation, I go over the

1 background of our concerns and recommendations. I
2 think I won't go over that. I will mention
3 briefly that at recent hearings where the
4 utilities presented their current work that was
5 going on, the following concerns arose.

6 Number one, the definition of emerging
7 technologies does vary from one utility to
8 another.

9 Two, there is very little coordination
10 among utilities in selecting and promoting
11 emerging technologies. There is no statewide
12 strategic vision for the selection and deployment
13 of emerging technologies and market transformation
14 programs.

15 Three, the utilities no longer have
16 specific programs on emerging technologies. The
17 emerging technologies are scattered throughout
18 utility programs in the residential, non-
19 residential, and new construction areas. Prior to
20 1999, some utilities did have programs
21 specifically targeted to emerging technologies.

22 Number four, utility projects on
23 emerging technologies are not fully coordinated
24 with emerging technology projects funded by other
25 organizations. For example, the U.S. Department

1 of Energy, the Gas Research Institute, the
2 Electric Power Research Institute, the CIEE, and
3 CEC's PIER program.

4 And number five, opportunities for
5 collaboration among utilities and other
6 stakeholders in California, as well as outside
7 California, exist, but have not been exploited to
8 their full potential.

9 We believe the absence of the mention of
10 Section 44, in parentheses, 3, in the public
11 notice on the workshop was inadvertent, which
12 talks about emerging technologies, and did not
13 reflect the CEC's intention to not address this
14 very important topic. Accordingly, we request
15 that the CEC redress the situation in the CEC's
16 transition plan by establishing a formal process
17 for developing a systematic and strategic approach
18 to emerging technologies, which integrates the
19 PIER and market transformation programs.

20 The rest of the presentation, the
21 prepared presentation, again, discusses the
22 importance of utilizing the resources of CIEE.
23 Since 1990, the CIEE, using funds provided by
24 California utilities at the direction of the CPUC,
25 has demonstrated the ability to coordinate and

1 implement a statewide program of research and
2 technology development aimed at advancing end use
3 energy efficiency and productivity in California.

4 As part of R&D efforts, research have
5 collaborated with the CIEE's utility sponsors, and
6 the Energy Service Industry in fuel testing,
7 transferring and commercializing promising
8 technologies. By developing a network of
9 researchers and potential users of emerging
10 technologies the CIEE has been able to
11 successfully demonstrate its capacity and ability
12 to conduct research and development on emerging
13 technologies, and help bring these technologies
14 into the marketplace.

15 So we recommend that the CEC work with
16 the CIEE and use CIEE resources to develop a
17 statewide strategy and plan for promoting energy
18 efficient emerging technologies in market
19 transformation programs, and for utilizing the
20 results from these programs in the development of
21 RD&D on emerging technologies. The information
22 resulting from these activities will be used to
23 improve the design and implementation of energy
24 efficient market transformation programs.

25 Now I'd like to focus on the second

1 point dealing with market transformation. We
2 think this is one of the critical areas of
3 emphasis that the programs in the -- that get
4 transferred to the Energy Commission should devote
5 to. And when we talk about market transformation,
6 we're talking about the promotion of energy
7 efficiency in the market. We're looking at
8 technologies and products both that are
9 commercially available and those, as I just
10 mentioned, the emerging technologies. We're
11 interested in services for market transformation.
12 And also, attitudes, values, and perhaps -- and
13 behavior, and perhaps the ethic of energy
14 efficiency.

15 The primary mechanisms include
16 information and education, and creative financial
17 mechanisms for financing energy efficiency. This
18 is leading to a paradigm shift from focusing on
19 energy consumption to the efficiency use of
20 resources through the market. Government does
21 have an important role to play, as well as some
22 other entities I'll mention shortly. But it is
23 important to work with all the key market players.

24 There are both policy and program
25 barriers that need to be addressed. I'm not going

1 to go -- present a list of those barriers. I
2 think most of the staff at the Energy Commission
3 knows that. But that is one area that needs to be
4 addressed when dealing with market transformation
5 programs.

6 There also, as mentioned by Mike Parti,
7 or -- yeah, I think it was Michael, just recently,
8 feedback loops. This is important for looking at
9 individual -- looking at both energy efficiency
10 among individuals, as well as programs. This is
11 important when you look at leveraging and what's
12 the best way to leverage your resources within a
13 market. And the use of feedback loops is
14 critical.

15 It's vital to have a good understanding
16 of the markets, of theory of action, and what has
17 been missing until recently, I think, around the
18 country as well as in California, is an emphasis
19 on theory based program change. And this really
20 needs a focus and looking at what are the
21 assumptions when you're trying to propose some
22 action. What are the hypotheses, and perhaps some
23 hypotheses testing. This is critical for not only
24 monitoring and evaluation, or measurement and
25 evaluation, but also for program design.

1 This could be done either at the
2 Commission, or a non-profit organization, as part
3 of the program development. It may be another
4 option might be providing funds to one or more
5 organizations that focus on developing the theory
6 of market transformation.

7 I say that because there really is a
8 need for what we call interdisciplinary teams,
9 where you have people not just from one
10 discipline, such as engineering, or even
11 sociology, but you bring these people together,
12 because it's a multi-faceted problem and
13 challenge. One possibility is the role of the
14 University of California at one of the campuses.
15 It could be UC Davis, UC Berkeley, any one. But
16 we think there is a need for support at the
17 University level for providing resources for
18 training and educating the people who will be
19 involved in market transformation. Again, both in
20 the design implementation and the evaluation of
21 these programs.

22 These people will focus not only on
23 individual behavior of the key market players, but
24 also the social organizations, and social
25 structures and cultural context. That is

1 important when you look at market transformation.

2 Again, CIEE can help play a role in
3 this, and collaborate either directly with the
4 CEC, or with the University organization, and
5 coordinate the efforts in market transformation,
6 particularly, again, as they relate both to
7 emerging technologies and research and development
8 opportunities.

9 Those are my comments right now. I'm --

10 PRESIDING MEMBER LAURIE: Thank you, Mr.
11 Vine. Any questions for UC this morning?

12 Mr. Messenger, a quick question, please.

13 MR. MESSENGER: Can you just give us a
14 timeframe in terms of your recommendation that a
15 strategic plan be developed? Are you telling us
16 to do that post 2001, right away?

17 MR. VINE: Good question. I overlooked
18 that. From my understanding, you're supposed to
19 come up with a report by the end of the year, and
20 my understanding is that the utilities will be --
21 continue to implement programs for at least two
22 more years?

23 I think the strategic planning can occur
24 as soon as you complete this -- the reports you're
25 working on now, so January 1st of next year, I

1 think. Unless there are some institutional or
2 legal barriers to that, I think you can begin that
3 the beginning of next year.

4 MR. MESSENGER: Thank you.

5 PRESIDING MEMBER LAURIE: Thank you, Mr.
6 Vine.

7 Mr. Link. Mr. Don Link.

8 MR. LINK: My name is Don Link. I work
9 for an electrical contracting firm. We are at the
10 place where we're up against the road at the
11 energy conservation. And I'd like to thank you
12 for having us here to talk to you.

13 My comments, the written comments are
14 fairly extensive, so I will not go over them
15 except in a general way. And I guess what I'm
16 talking about here today is a qualitative issue
17 for the incentive programs.

18 As I see it, incentives of some sort
19 will probably be necessary in the future, and
20 taking up what Mr. Vine was just talking about,
21 there are particularly --

22 PRESIDING MEMBER LAURIE: One question.

23 MR. LINK: Pardon me?

24 PRESIDING MEMBER LAURIE: Do you
25 actually represent the organization?

1 MR. LINK: This is California
2 Association of Lighting Efficiency Professionals.

3 PRESIDING MEMBER LAURIE: And you are
4 there on that -- you are here on that
5 organization's behalf?

6 MR. LINK: I'm here on behalf of that
7 organization. It's a trade group that represents
8 approximately 25 to 30 lighting companies
9 throughout California.

10 The incentive programs are very
11 important for the development of new technology.
12 We have seen this over the years from the early
13 eighties, as the technologies have changed. And
14 what we would ask is that the California Energy
15 Commission, as it assumes responsibility for
16 crafting the new arrangement, the new structure,
17 be very sensitive to the need for stability and
18 predictability in the incentive programs.

19 Very recently there have been some
20 drastic changes made that have upset the industry
21 quite a bit, and the predictions are this year
22 that the moneys available for incentives will be
23 pretty -- in a major way, under-subscribed. Only
24 the direct rebate seems to be spending the funds
25 available. The small, standard performance

1 contracting program is pretty much a bust for all
2 three utilities, at about a 30 percent level, and
3 -- level of subscription predicted by the end of
4 the year. It's much, much lower right now, it's
5 more in the range of five or six percent.

6 And I'd ask also that the California
7 Energy Commission be very careful about
8 inclusiveness. That all ratepayer types be
9 eligible for programs, and that all classes of
10 trade allies be involved in the process of
11 crafting these programs. There's a real need for
12 sensitivity and respect for precedents in the
13 energy efficiency field. The programs have been
14 pretty effective to this point. California has
15 been the leader in the nation, and is the envy of
16 much of the nation and the world in what it's
17 accomplished, but it is a fragile industry that
18 the marketing can be very easily upset.

19 And I would ask that the California
20 Energy Commission take the positions first
21 directed, and that is first of all to do no harm.
22 And if you move in and change things drastically,
23 upset the stability of the industry, and make
24 changes without announcement so that people can
25 plan for them and actually put them on the

1 calendar, what happens is the industry goes to a
2 standstill.

3 And in the lighting industry, there is a
4 lot of truth to that situation right now. The
5 lighting has not been doing what it was doing six
6 months or a year ago. And we can lay this to the
7 changes that have been put into the incentive
8 program, particularly the attempt in market
9 transformation to force standard performance
10 contracting down the industry's throat. It works
11 for one part of the industry, particularly ESCOs,
12 which have used that as a marketing and a sales
13 and implementation tool for a number of years, but
14 it does not work in the simpler programs. A
15 lighting program that can be completed in two
16 months shouldn't take a year or two years to
17 finish the bureaucratic paperwork and the payment
18 of the incentive.

19 A good example to this sensitivity to
20 the past, which is what I'm asking you to do, is
21 in the 1980's, PG&E territory had a custom rebate
22 which was based on KWH saved, which is basically
23 what the standard performance program is doing.
24 It was effective, it was flexible, it was very
25 easy to administer, and it was cheap. It was very

1 cost effective. That was discontinued. The
2 standard performance contract which has been put
3 in place to replace it and to change the way that
4 the market does its business, by contrast is
5 complicated, rigid, cumbersome, costly, and it's
6 being arrested -- excuse me, resisted by both
7 trade allies and customers alike. That's going on
8 right now. It's why the -- these programs are
9 under-subscribed.

10 So basically, in closing, I would ask
11 that we learn from the past and be cautious about
12 discarding its better lessons as we look at the
13 incentive programs in the future, and that we
14 craft these programs keeping the best of what was
15 working in the past, and that they be market
16 driven and administered not in a top down fashion
17 but in response to the marketplace and the trade
18 allies who are out there actually doing it. That,
19 today's market transformation, I think, is
20 attempting to do it the other way, top down.

21 And our organization did not exist eight
22 months ago. When this incentive program was
23 announced, very much as a surprise to people,
24 insiders in the industry who work with the
25 utilities alike, this organization sprang up like

1 a -- I was going to say a week, but I think I'll
2 say a flower in the forest.

3 (Laughter.)

4 MR. LINK: And we're going to be there.
5 We're going to be around. Mr. Messenger can
6 certainly attest to it. I've seen him. And on
7 that level, I think it's very important that the
8 CEC be very important in monitoring what's going
9 on with the CBEE right now. There are some
10 important mistakes. There are probably going to
11 be some good things that come out of the program,
12 as well. But I think it's very important to look
13 at the mistakes, because if they're repeated in
14 the future, I'm saying that I think you can kill
15 parts of the industry that have been delivering
16 most of the KWH savings that you've been -- that
17 you're here, really, to talk about.

18 Thank you.

19 PRESIDING MEMBER LAURIE: Thank you, Mr.
20 Link.

21 Mr. Wilson.

22 MR. WILSON: Mr. Link, how long have
23 these rebate programs existed?

24 MR. LINK: The rebate programs I believe
25 started in 1982 or '83, which puts them back 16,

1 18 years ago.

2 MR. WILSON: One of the goals of market
3 transformation is to transform markets so that
4 rebates aren't needed. How do you see market
5 transformation working in the future so that the
6 rebates might not be needed, or the kinds of
7 problems you're talking about?

8 MR. LINK: Addressing that, I think if
9 you're going to foster new technologies, you're
10 probably going to have to keep some sort of
11 incentives around, some sort of subsidies,
12 basically. I like the word subsidy better than
13 incentive or rebate, or any of those things.
14 That's really what it is.

15 The subsidy allows, and it's in the
16 literature that I gave you, the subsidy allows the
17 -- the new technology to get a start. It gets
18 acceptance and recognition in the marketplace.
19 The economies of scale come in, competition
20 develops, and prices go down. And if you need
21 examples of that, occupancy sensors are a good
22 one. Electronic ballast TA lamps, another very
23 good one. The electronic ballast that was \$30 or
24 \$40 when it came out can be purchased now for
25 about 12 bucks. And it's a universal application.

1 Well, that happened with subsidies early
2 on, and now we're down to a level of about 15
3 percent of project cost, is what rebates are
4 paying. The standard performance contracting
5 program is at about twice that. It's an expensive
6 way to do it. And, as I say, it's being resisted
7 by my part of the -- of the energy efficiency
8 industry.

9 Beyond that, if subsidies are going to
10 disappear, I think it's very important that it
11 happen in an announced, scheduled way, so that the
12 industry -- not the academicians, not the guys
13 sitting here playing with the market and saying
14 let's do this and see what happens over here --
15 let the marketplace respond to it. If you
16 announce that in 2003 there are no more rebates,
17 and you had a scheduled reduction of those to
18 zero, the marketplace would respond. And the
19 worst response might be that it would go away,
20 which would be awful, but you'd have a chance to
21 watch that as you did it.

22 The best thing that could happen is
23 you'd get creative people thinking, and self-
24 interest propelling them to figure out a way to
25 work the market.

1 But I am saying don't do it from top
2 down. You're trying that now, it's not working.
3 That's why I'm here. I should be on a jobsite.
4 When I leave here I'll be going to a school
5 district that we're completing now.

6 An example, a year ago we did the San
7 Jose Unified School District. It took a year to
8 do the whole district. It would've taken over a
9 year and a half to do it and be completed with it
10 under standard performance contracting. That
11 doesn't make sense. And they didn't want it. An
12 ESCO did the job, and didn't use the SPC program
13 because the rebate made better sense.

14 You've got to open this up so that the
15 players out there can say I want to use this
16 method, not that method. If you're getting the
17 KWH savings, do you care whether they do it under
18 the red banner or the blue banner? And that --
19 that's what I'm saying, and I don't think market
20 transformation, the way it is being imposed on the
21 marketplace, is going to be successful.

22 And, again, that's why I'm spending my
23 time. There've been many hundreds of hours spent
24 by people in our organization addressing bodies
25 that are dealing with these issues. We feel about

1 it passionately. Most of us, as I've mentioned
2 before and it sounds a little self-serving, are
3 sort of good boy scouts. We're in the industry
4 not just to make money, but because we enjoy doing
5 what we're doing, and the benefit it does for
6 society, for the planet, for the ecology, for the
7 environment. And I suspect most of you people
8 also share those kind of attitudes.

9 But it's -- it's a real thing in the
10 industry, so there's more passion, I think, than
11 just the money issue would bring into it. And
12 we're just saying don't kill our industry by
13 fiddling with the market, particularly if you
14 don't understand the details.

15 MR. WILSON: Excuse my ignorance of your
16 -- your association, your companies. But do you
17 consider your -- do your members consider
18 themselves ESCOs?

19 MR. LINK: No.

20 MR. WILSON: Or are they just
21 contractors?

22 MR. LINK: ESCOs are -- Johnson Controls
23 is a good example of an ESCO. Honeywell, Landis
24 Siemens, they're very large companies. They often
25 provide extensive comprehensive retrofits. Rick

1 Sperberg is here, and I'm sure he will speak to
2 what they do. They will go in and they will do
3 HVAC. They'll do boilers. They will do lighting
4 usually to pay for it.

5 San Jose Unified School District
6 replaced its -- its swimming pools and its
7 heaters, and its air conditioning equipment, by
8 the lighting savings. And it's what made the
9 thing work. The savings in this case amounted to
10 close to 60 percent of the energy being used.
11 None of these other measures have that kind of
12 payback from savings, and they usually have very,
13 very long paybacks, 10, 15 years. So the stuff is
14 bundled, and the standard performance contracting
15 programs work particularly well at that level,
16 where you're bringing in infrastructure, major
17 infrastructure replacements along with the
18 quicker, easier types of retrofits that gather
19 lots of KWHs quickly.

20 Lighting does it. Lighting -- lighting
21 has done it. It's the quick and easy way to get a
22 lot of savings. And for that reason, I think that
23 the ESCO issue is not whether we're ESCOs. We
24 don't want to be forced to act like ESCOs, because
25 it is not in our interest and it's not in the

1 interest of energy saving. At the same time, I'm
2 working for an ESCO right now on the school
3 district, and that will go on.

4 But I do have other customers that I
5 can't deal with, and who -- we've actually had
6 several that decided not to do the projects at all
7 since this change. Well, that's just -- that's
8 discouraging when you set up a relationship with a
9 customer, and you're trying to foster that and
10 move on to the future.

11 As it is now, a large customer, over 500
12 KW, cannot do anything under the rebate program.
13 So if they're going to remodel part of their --
14 their facility, which happens constantly in
15 hospitals and office buildings, they're out of
16 luck. They're not going to use the SPC program
17 for it. It's far too expensive and troublesome.
18 So many times they just put it on the back burner
19 and don't do it.

20 That's probably more than you wanted.

21 PRESIDING MEMBER LAURIE: Commissioner
22 Pernell.

23 COMMISSIONER PERNELL: Mr. Link, your
24 association, is it strictly commercial? Do you do
25 residential lighting retrofits, as well?

1 MR. LINK: I think that it would be safe
2 to say that maybe one percent of it would be
3 residential. It's not a part of the industry that
4 lighting companies seek, because of the scale.
5 It's difficult to send a truck out to put in one
6 or two fixtures in a -- in a residential setting.
7 At one point, multiple residential condominium
8 complexes, apartment houses, hotels, things of
9 that kind, were a target. But I think most of
10 them have done the work at this point, and if it's
11 a Mom and Pop on Elm Street, lighting companies
12 generally do not work with them. And the products
13 are available in the Home Depots and the various
14 -- and the Orchard Supply Hardware stores, so they
15 can put them up themselves.

16 COMMISSIONER PERNELL: What about a new
17 subdivision coming in with 150 homes? Have you
18 looked at that as a -- a way to engage the market?

19 MR. LINK: I think all of the companies
20 have done projects on that scale. But there
21 aren't very many new subdivisions with 150 houses,
22 and many of them are already mandated to have the
23 kind of lighting we would be putting in anyway.
24 Title 24 has come a long ways to forcing them to
25 do the smart thing. We're also finding that a lot

1 of the lighting designers and electrical engineers
2 are including these in their specifications now.
3 So we're not seeing as much dumb stuff being put
4 up now.

5 COMMISSIONER PERNELL: Thank you.

6 MS. TEN HOPE: Commissioner?

7 PRESIDING MEMBER LAURIE: Go ahead.

8 MS. TEN HOPE: You've talked about
9 rebate programs as -- as being an option that you
10 prefer. Are there other types of programs that
11 support the efforts that -- that you're doing,
12 educational programs or other types of programs?

13 MR. LINK: Yes.

14 MS. TEN HOPE: And what --

15 MR. LINK: In -- in our literature there
16 -- we mention there that the educational job that
17 has been done by the utilities during the eighties
18 and nineties is largely responsible for where we
19 are now, and the successes we've had. Energy
20 conservation is not a hobgoblin to most people in
21 society. They've heard of it, they understand
22 that it probably does work. And I think the
23 utilities have come a long way.

24 It seems that in the last few years the
25 utilities have been made the whipping boys of the

1 situation of this market transformation thing, and
2 I'm not sure that it's entirely fair, given how
3 far they've brought us along the way. I don't
4 know if it came kicking and screaming. That --
5 that happened on the other side of the fence. But
6 we worked with them, and to their credit they've
7 actually consulted us about rebates.

8 And surprising to you, you might be
9 surprised to learn, we have recommended that
10 rebates come down for certain items as they become
11 less expensive. And I have several colleagues who
12 work directly with utility administrators crafting
13 the incentive, so that -- it used to be 30 or 40
14 percent, and it was a lot easier to sell at that
15 time. Now it's down to about 15 percent, it's
16 pretty squeaky. And if it gets a lot lower than
17 that, it's not going to be a consideration. That
18 is not going to -- that's not going to propel a
19 potential customer to move ahead with the program.

20 So the direct rebate programs are simple
21 and quick, and very easy to administer, and
22 they're very cheap for the utilities to
23 administer. Standard performance contracting,
24 just the study of SPC recently cost \$200 to a
25 thousand dollars that the CBEE spent to get a

1 fixed study that said it wasn't working. And then
2 the CBEE ignored it and said well, what can we do
3 to make this thing work better, how can we go
4 further down the road with this.

5 So it's -- it's an expensive program
6 that has its place, but I don't think it should be
7 dominant for the entire industry. Certainly not
8 for our part of it. We would use it where it's
9 appropriate. And we do pair up with mechanical
10 contractors and mechanical companies to do HVAC
11 projects along with the lighting. That's
12 something that -- that partnering does go on.

13 MS. TEN HOPE: Thank you.

14 PRESIDING MEMBER LAURIE: Is that it?

15 Thank you, sir.

16 MR. LINK: Thank you.

17 PRESIDING MEMBER LAURIE: William
18 Nelson.

19 MR. NELSON: Good morning,
20 Commissioners, staff. My name is Will Nelson. I
21 represent Residential Energy Efficiency Clearing
22 House. I want to thank you for this workshop type
23 of opportunity for people to come in and talk to
24 you about your -- your task before you, the
25 transition report.

1 On the headline question of should these
2 programs exist, should funding go forward, I would
3 comment that after a century of stupendous
4 industrial and technological growth, which has had
5 impacts on the environment that we have yet to
6 even scope, I think there is no question but that
7 the public spirit needs to make a commitment for
8 at least a generation, for the foreseeable future,
9 to funding and investing the types of efforts that
10 we see with the energy efficiency program.

11 The level is currently approximately 1.7
12 percent of the electric rate component which
13 compares unfavorably with up to ten percent in
14 other countries. I'm not suggesting that it
15 should be increased at this time, because I
16 believe that there are co-investment and market
17 based mechanisms that can effectively increase
18 that investment, and I would want to see any
19 future programs proven out and developed before we
20 increased the levels. Although, as I step through
21 the outline that I presented to you, you'll
22 probably see at least a billion dollar program
23 annual, as opposed to a quarter billion dollar
24 program, approximately, where it is.

25 This outline is -- I'd like to speak to

1 you about some dimensions in thinking about your
2 transition report. Some of the recommendations
3 are specific. Some of them are basically food for
4 thought, as -- as you look at this program and
5 look at your other responsibilities.

6 First of all, you have a job before you
7 to create and recommend and transfer an
8 administrative framework, one that has been quite
9 contested for a number of years. You have a good
10 body of testimony and experience and background, I
11 think, which -- which helps form up many of the
12 questions, but I would say to you, for your report
13 to really focus on the administrative framework
14 questions and focus on financing mechanisms, and
15 just what the mechanisms will be for where that
16 money goes. And I'll get that -- to that in a
17 moment, in saying that the customer should be a
18 much more direct part of that equation. We still
19 haven't even achieved that. And customer choice
20 was intended to be one of the keystones of
21 electric restructuring.

22 I am not downplaying program substance
23 by any stretch, or program design. But I suggest
24 to you your job is so big that you need to focus
25 on administrative -- I believe that many of the

1 program questions will follow if you keep your eye
2 on the administrative ball.

3 My second point in the recommendations
4 is that you should institutionalize and make
5 recommendations for how the Utilities Commission
6 role is institutionalized. I'll give just one
7 example. What should be the Utilities Commission
8 rate component review process. Should it occur
9 annually, should it occur biannually, should it
10 occur in joint session, should there be -- should
11 it be funded. Should their energy division be
12 funded on an ongoing basis to be researching that.

13 And let us not forget that the Utilities
14 Commission will remain the powers body on
15 questions over meters, the bill, the billing
16 platform, and that that commission has the powers
17 to initiate orders. I believe that you will --
18 that the public sphere will need those powers in
19 order to accomplish certain ends.

20 The third point of the outline is I --
21 in my years of thinking about this, and thinking
22 about electric restructuring, I've come to a
23 conclusion that for the time being, as we look
24 forward, how we assemble programs, how customers
25 make decisions, how the details get worked out, I

1 believe we should consider that the utility
2 distribution company will be the primary billing
3 company, and that they will be the basic
4 verification agent in that respect.

5 Now, when I speak of verification, I'm
6 talking about a very rudimentary one, that an
7 account exists, a service delivery point exists,
8 and a given level of energy usage might exist.
9 I'm not talking about a performance verification.

10 I think that will uncomplicate a lot of
11 things. That's the position that we've reached,
12 because we would like to see the public sphere go
13 forward in promoting point four here, customer
14 based and customer choice decisions. And we
15 believe a voucher program, with all of its
16 details, is feasible for large energy users, for
17 the institutional sector, for the government
18 sector, that can aggregate large numbers of
19 accounts and come up with a fairly substantial
20 chunk of money that they can regard as their own
21 money. I won't go into the details of calculating
22 such a voucher, but this is where I come back to
23 the UDC being the basic account verification
24 agent.

25 On the reverse of this outline, you'll

1 see in terms of the objectives, rough timeframes
2 and a rough sequence of priorities. And I'm
3 suggesting that year 2001 can be the base
4 reference year for the energy usage levels upon
5 which a customer would obtain its voucher.

6 Moving on to point five of the outline,
7 and just to point out, number five, number seven,
8 and number twelve are the overly ambitious
9 recommendations to this body, and really push the
10 envelope, I would expect, of what -- what you see
11 your mission on this report. But I want to speak
12 to them, because I believe they're very important.

13 Again, in thinking through this over the
14 years, because you're about to invent a wheel, I
15 propose to you that you incorporate the planning
16 for distributed power and cogenerated power
17 generation. It should be integrated. To what
18 degree, I don't know. But I do not think it
19 should be left out of the administrative
20 framework. That's a big bite to chunk off. It
21 might be a non sequitur. I believe it's
22 essential.

23 Unfortunately, cogeneration has been
24 left out of the energy efficiency definition at --
25 through the Public Utilities Commission rulemaking

1 and definitions. And that's a theology that I
2 won't argue here, other than to say we didn't
3 support that definition. We believe that
4 cogeneration is part of the energy efficiency
5 equation. We believe it's integral to the future
6 of planning distributed power.

7 On point six, we believe that the
8 information -- rather than thinking of your agency
9 as a market actor, which I -- I don't expect you
10 do, we do support a strong information -- I'll
11 call it an information authority, even. Here
12 again, without going into the details, which many
13 of you are familiar with, whatever information you
14 decide you need to administer this program,
15 whatever information you decide that you need
16 statutory power, or a statutory powers partnership
17 with the PUC, it's incumbent upon you to define
18 those and spell those out. Because in more --
19 more cases than not, you will not get the
20 information you want unless you have those
21 statutory powers.

22 Point seven, you may not consider this a
23 central mission of your agency. Given where
24 California is, on the edge of tectonic plates,
25 given its history, given our viewpoint that the

1 state is still behind where it should be on site
2 assessment and site disclosure, given that we
3 support strong funding for the data acquisition
4 and site assessment role for energy efficiency on
5 sites, we believe that that data acquisition and
6 site assessment should be synergized at some level
7 with seismic hazard assessment.

8 I'm not saying this agency should
9 undertake the task of the California Earthquake
10 Authority. I'm saying in whatever common building
11 archives and data archives are being developed
12 through public agencies, duplication be avoided,
13 synergies be sought, and that we move forward as
14 -- as quickly as possible to more accurate and
15 better seismic assessment bases.

16 As many of you are probably well aware,
17 the utilities themselves have a significant
18 technical and engineering effort ongoing for their
19 own system with seismics. Not that they have
20 direct responsibility on the buildings, but that's
21 just a footnote on this.

22 Point eight, we believe the time has
23 come for the Energy Commission to plan for a
24 financing authority. We believe you should take a
25 look at that, and that should be a part of your

1 transition report in describing how the state and
2 its customers can take advantage of the tax
3 advantages, and the capital flows that could be
4 made available through such a financing authority
5 connected with energy efficiency programs. This
6 would be especially useful for the early adopters
7 of the large energy users and a voucher program,
8 as well as institutional and government users.

9 We would suggest that this financing
10 authority be answerable, and be under the powers
11 of the Energy Commission, but that it should be
12 relatively semi-autonomous. We support a
13 professional qualified directorship for such an
14 authority that would be appointed by the
15 Commission. We do not support the appointment of
16 the directors of such a body by either legislative
17 leaders or even the Governor. Although we would
18 not rule out the possibility of having the
19 Governor appoint the chair of such a body, we
20 would prefer that that body select its own chair.

21 Point nine, with respect to a transition
22 period and the transition details, we believe that
23 you should look to the Utilities Commission and
24 look to the current administrators for a very
25 detailed and comprehensive report as -- as to what

1 they think should be done in the transition. The
2 transition period should be one year, one year
3 only. We have actually been in transition since
4 1994.

5 The term of art transition has been --
6 has been part of the discussion of restructuring
7 since 1994. We strongly suggest to you that with
8 the closure of the AB 1890 period, that we enter a
9 new period and quit calling it transition. So we
10 recognize the -- that there is the reality of a
11 transition; that transition should be occurring in
12 one year, 2001.

13 Point ten, with respect to the role of a
14 public benefit corporation. We think you should
15 seriously -- akin to the finance authority
16 directorship, using the same methodologies, we
17 think there's a potential role for such a
18 corporation. We do not think that such a
19 corporation should be tasked with being program
20 administrator. For one thing, that will guarantee
21 another two to four years of delay of effective
22 implementation, in my own opinion.

23 However, there has been so much interest
24 and so much talk, and I believe there is a role
25 for another body to play in this. And I will just

1 suggest several. Here again, this is dimensional
2 thinking as opposed to specific shoulds.

3 We might consider the role of such a
4 corporation to -- to be the vehicle for the
5 development of public/private partnerships.
6 Although I'm nervous about that, because that will
7 potentially introduce a lot of conflict
8 situations, nonetheless I think it should be
9 looked at.

10 Another role for it could be as a
11 catalyst and a facilitator for the development of
12 community and regional energy authorities.

13 A third role which we believe is not
14 being addressed well at all under the current
15 regime would be a role of software trustee. The
16 role of software and uniform software platforms is
17 going to be very central to the development of
18 energy efficiency services. It may be that such a
19 corporation could serve a trustee role for -- for
20 such software. Right now it's catch as catch can,
21 and that's not workable. That is not going to
22 give us the uniform low cost transaction platforms
23 that are needed for this.

24 A fourth potential role would be that of
25 a watchdog or an advocate of sorts. The PUC has

1 an office of ratepayer advocates that performs
2 that role. That role could possibly be looked to.

3 Again, we think you should discuss it.
4 We think you should recommend it. But we think
5 you should limit it and define it as to what it
6 is. And at this point, we are not supportive of
7 it becoming a program administrator. We do not
8 think it could -- it could ramp up the capacity,
9 nor assume the powers that are needed to collect
10 the information from the billing platform that is
11 needed, and connect it together with the types of
12 voucher programs that are necessary. We also
13 believe that the -- that the Energy Commission
14 itself has such a strong history, and has such a
15 strong network and such a basis of communication
16 to the interested parties, the affected parties
17 and the customers, that it is -- it is the party
18 that is best suited at this point to perform that
19 role.

20 The 11th point, which could be another
21 all-day session, we think you should talk about
22 and describe what the potential roles for
23 community energy authorities are. We tend to
24 favor more of a regional energy authority concept,
25 either at a county level or some other compact,

1 contiguous geographic entity.

2 In the case of the larger jurisdictions
3 like San Diego, San Jose, San Francisco,
4 Sacramento, that's a different question. They
5 kind of take on their -- their own stature and
6 role.

7 And the 12th, I would just like to
8 identify the term. This is a two-day working
9 session. It's the concept of a public energy
10 management franchise operator. Put the franchise
11 in quotes, because that is a legal term of art in
12 utility regulation. But we would -- we would like
13 you to think about, if you are going to go out and
14 contract under a public contract these kind of
15 macro-administrators. There's been talk of, you
16 know, macro-administrators for a residential
17 sphere, for a non-residential sphere, for a new
18 construction sphere.

19 I strongly urge you to look at the
20 concept of a geographically based, what we'll call
21 a transition franchise, but effectively it's a
22 franchise, but it's not completely exclusive, and
23 I'll just make one point on that before I close.
24 But effectively what they would do is they would
25 supervise the providers. They would be the

1 administrators that have been talked about for the
2 last three or four years. They would step in and
3 perform that role. And on the back of this page,
4 I've described an expansion -- expanded list of
5 what their potential roles can be. They would be
6 a supervisor, they would run the information
7 system, they would have the engineering capacity
8 that we think needs to be there, but we're not
9 proposing that the Energy Commission itself, you
10 know, double or triple or quadruple its size in
11 order to undertake the future of distributed
12 energy generation.

13 They would not perform installations.
14 They could perform engineering. They would fall
15 into a gray area. There's been this question of
16 what's an administrator and what's an implementer.
17 I would suggest to you they would be in a gray
18 area where they would be performing information
19 functions. I would suggest that up to -- there
20 might be in the neighborhood of 15, 18 of these
21 PEMFOs, geographically awarded within the state.
22 They would work on common software platforms.
23 They would work under a public contract. They
24 would work under extended contracts. Five years
25 should be -- should be the standard. They might

1 start out with a three plus two, a review done
2 after three years in the first period, with pretty
3 much it expected that they would complete the five
4 year period unless there was terrible failures.
5 You would have a competitive basis for comparing
6 operators.

7 So, again, in closing, the PEMFOs would
8 not do installations. We do not believe that the
9 utility distribution companies are best suited to
10 be the PEMFOs. We believe the conflicts for them
11 to be decision making, distributed power
12 generation, is even greater than the conflicts
13 that they currently have over implementing energy
14 efficiency. We would even suggest that their
15 affiliates within this state should not be the
16 PEMFOs.

17 But to add some spice and some
18 effectiveness to how these PEMFOs would operate,
19 let me give you one example of how the franchise
20 would be limited in nature.

21 PRESIDING MEMBER LAURIE: And then if
22 you could summarize your comments, Mr. Nelson. We
23 want to make sure that --

24 MR. NELSON: Certainly. I'm at --

25 PRESIDING MEMBER LAURIE: -- we get --

1 MR. NELSON: -- the end.

2 The franchise would be limited in this
3 nature, in one respect, as an example. Say there
4 were customers with multiple sites throughout the
5 state. And they have -- they have plans for doing
6 energy efficiency, they're applying for vouchers,
7 they're applying for loans, incentives, and such.
8 But they have sites spread out in more than one
9 PEMFO territory. That type of customer would have
10 a choice of choosing their PEMFO. They could
11 choose -- they could choose one in any number of
12 territories.

13 So that would add a competitive edge to
14 the PEMFOs, in terms of who they worked with, as
15 far as their customer base, and to -- to no small
16 extent their -- their payments would be based --
17 would be activity based in that respect.

18 Thank you very much for this time.

19 PRESIDING MEMBER LAURIE: Thank you, Mr.
20 Nelson.

21 Any questions?

22 Thank you, sir.

23 Mr. Lieberman, City of San Jose.

24 And we will break at noon. We'll take a
25 one hour break.

1 MR. LIEBERMAN: I am Dan Lieberman. I'm
2 with the City of San Jose. I did make some
3 written comments, but we're expecting that a city
4 council member or a few may be able to sign on,
5 and so I think we'll refrain from submitting them
6 until that's been determined.

7 I agree with a lot of the points that
8 have been made to date, and the interests of the
9 local government in seeing the continuation of
10 energy efficiency programs is -- the economics in
11 developing a energy efficiency market in San Jose
12 keeps dollars in the local community. It improves
13 the environment, which has been stressed several
14 times. It increases comfort to residents and to
15 other building occupiers, people who work in a
16 built environment, and it makes local businesses
17 more competitive.

18 There's been a lot of discussion so far
19 about market transformation, and I just want to
20 take a quick step back and look at the goals that
21 were set out in establishing these energy
22 efficiency programs. And when I look at, for
23 example, the mission of the CBEE, or PUC, the
24 goals that they have in these energy programs,
25 we're looking at the transformation of the market

1 to create a mature market for energy efficiency,
2 and also to create a self-sustaining market.

3 And I don't think that either of these
4 goals have been met, particularly in the
5 residential and small business markets. I'll let
6 the NAESCO, or whoever, talk about the larger
7 markets, but I think on the -- those two
8 marketplaces have not -- we haven't reached those
9 goals, and I don't expect them to be reached
10 during the time period that's established for the
11 current energy efficiency program.

12 So we do support the continuation of
13 these programs. And this was -- I think these --
14 the statement is documented well by the CBEE study
15 about residential attitudes towards energy
16 efficiency, where there's a lot of support when
17 people are educated about energy efficiency, but
18 there just simply hasn't been enough public
19 education.

20 The role that we see for the city is one
21 that can help transform this market, and bring
22 more customer education. And to go back to the
23 question that was asked of Lisa Wood from San
24 Diego, during her presentation, the City of San
25 Jose has been selected by PG&E to start an

1 innovative pilot program which I think
2 demonstrates some of the abilities that local
3 governments have in bringing about this needed
4 market transformation.

5 We have been selected to do a market
6 analysis and see who has been participating in
7 these energy efficiency programs. Who is this
8 under-served market, is this a demographic, is
9 there a demographic profile that can describe this
10 market, is there a particular housing stock of
11 people who participate or who don't participate.
12 These are the types of questions that a lot of
13 people are asking, which have not been answered.
14 So we'll first -- the first step is to do that
15 type of a market analysis.

16 The second is to look into the types of
17 services that a city or other local jurisdiction
18 can provide in tapping into these under-served
19 markets. You know, the City of San Jose, for
20 example, we have a citywide billing system.
21 That's a citywide type of marketing. We can look
22 into more targeted types of relationships that we
23 have, for example, with neighborhood associations,
24 with the chambers of commerce, with ethnic
25 chambers of commerce, with the local architects'

1 association, builders' association, building
2 managers' associations. Those are the types of
3 ties that local jurisdictions have, and we can tap
4 into those ties to develop the local market for
5 small businesses and residential markets in
6 particular.

7 As for other roles of local government
8 in terms of codes and standards, that's another
9 place where local governments can fit in. And
10 we've been quite eager to respond to an RFP for
11 the local government initiatives program, which
12 was established by the CBEE and by the interim
13 administrators. We've been waiting for that RFP.
14 We were very excited when code standards and local
15 government initiatives was selected as one of 14
16 core program areas statewide, but we've yet to see
17 the RFP. And so I think that's an opportunity
18 that's being lost right now that could be gained
19 if these programs are continued in the future.

20 On the issue of oversight, the city's
21 perspective for oversight is one is a major
22 utility customer. Second, we've been
23 participating in the technical advisory committee
24 and have been sort of following this closely. And
25 thirdly, as an advocate for our residents and

1 businesses within the City of San Jose, San Jose
2 constituents pay \$20 million annually into the
3 Public Goods Charge Fund, and the City of San Jose
4 as an institution is very interested in maximizing
5 the benefit from this 20 million that we're paying
6 in on behalf of ourselves, as a municipal
7 government, and also for the residents and
8 businesses.

9 And so we do support the continuation
10 and the structure that's been proposed, for
11 example, in SB 110, but with a few caveats which
12 I'll list quickly, and then these will also be
13 included in our comments when they're submitted in
14 writing.

15 We want to see institutionalized local
16 government representation on any steering
17 committees that come out of this. We were able to
18 finally garner a seat on the TAC, but that was
19 after much of the process had gone by. But we
20 very much appreciated and took advantage of the
21 opportunity to provide whatever input we could
22 during the development of these programs.

23 We want to be sure that there's adequate
24 staff resources from the CEC, or from whoever is
25 administering these programs, to support project

1 administration so there aren't any slowdowns.

2 We want to see a demonstration of
3 commitment to the local government role, as I and
4 the other local government representatives have
5 put out today, in terms of the services that we
6 can provide.

7 We want to see a demonstration of
8 dedication to extending Public Goods Charge Funds
9 beyond 2002. And we'd like to see -- and this is,
10 of course, a, you know, if the world was a perfect
11 place -- a balance of fairness with an allocation
12 of time for meaningful input. For example, the
13 comment period times are often very short, which
14 makes it very difficult for a public institution
15 to provide comment because there's a certain
16 channel of bureaucracy, as you all know, that we
17 have to run through. On the other hand, you don't
18 want to have it too long, because then it delays
19 the process. But that's the type of balance that
20 we're looking for.

21 As for coordination and synergy of
22 energy programs, we're very interested in the
23 opportunity that the CEC will provide in bringing
24 together energy efficiency and renewable energy
25 programs. That's the type of program that the

1 city, as a customer, is quite interested in. The
2 purchase of renewable energy from the grid, the
3 purchase of renewable technology, and the
4 opportunity to finance that through energy
5 efficiency, we're very interested in the types of
6 programs where that would be allowed, and also --
7 or would be fostered. And also, programs
8 sponsored, the energy efficiency statewide
9 programs that might incorporate other types of
10 environmental efficiencies, such as waste
11 reduction, water efficiency, bringing in other
12 types of efficiency in with energy efficiency.

13 Moving on to the local, regional and
14 state issue. Most of the programs right now do
15 not take a local approach, or -- or target
16 particular local needs for energy efficiency.
17 Each locality has different types of climates.
18 San Jose has a particular climate where certain
19 types of measures are -- have a shorter payback
20 and some are irrelevant. And local jurisdictions
21 have a particular eye on local needs and how the
22 money can best be spent.

23 Each local government is going to have
24 its own priorities, and the City of San Jose I
25 think has a much different set of priorities and

1 capabilities than some of the other local
2 governments.

3 We see ourselves as being a regional
4 force. We don't see the need, as Mike Messenger,
5 I think, had asked earlier, about a type of system
6 where the money would either come regionally or
7 statewide. We don't see the need in San Jose for
8 it to come regionally. That seems to us like an
9 additional layer of bureaucracy. But that might
10 work somewhere else so, you know, I wouldn't rule
11 it out. But in our case, you know, we don't see
12 the need for it to come through anyone regionally,
13 because a lot of our operations are already
14 regional. We do recycled water for the whole
15 South Bay. Our ultra low-flow toilet program is
16 -- goes beyond our city limits, and several of our
17 other initiatives do not fall strictly within the
18 city limits, so -- even though we're operating
19 them.

20 So in sum, we'd like to see the
21 continuation of the work in progress. We have
22 this initiative with PG&E which we would like to
23 see continued. And we're willing to help in the
24 development of any criteria. A lot of discussion
25 has discussed the bang per dollar, the kilowatt

1 hour savings per dollar as one criteria for
2 evaluating energy efficiency programs. We think
3 alternative criteria should be brought in, such as
4 meeting certain sustainability criteria, the
5 indicators of sustainability may be criteria that
6 involve targeting untapped marketplaces such as
7 residential, or certain housing stock. I don't
8 know, mobile homes, or multi-family. First the
9 market analysis would need to be done to see who
10 the target would be. But, you know, certainly
11 alternative criteria to a simple dollar per
12 kilowatt hour saved could be developed, at least
13 for some programs.

14 And that's the bulk of my comments. I'd
15 be happy to answer any questions.

16 PRESIDING MEMBER LAURIE: Thank you.

17 Questions for Mr. Lieberman?

18 Thank you, sir, very much.

19 MR. LIEBERMAN: Thank you.

20 PRESIDING MEMBER LAURIE: Ladies and
21 gentlemen, at this point we will break until 13:00
22 hours. And we'll see you back in a few minutes.

23 (Thereupon, the luncheon recess was
24 taken.)

25

1 AFTERNOON SESSION

2 PRESIDING MEMBER LAURIE: Is Mr.

3 Schiller in the audience, please? He is.

4 Good afternoon, Mr. Schiller.

5 MR. SCHILLER: Good afternoon. Thank
6 you for the opportunity to be here. I can discuss
7 the lunch menu, or -- now, is it better to be the
8 last person before lunch or the first person after
9 lunch, is my question.

10 PRESIDING MEMBER LAURIE: It's better to
11 be the last person before lunch.

12 (Laughter.)

13 MR. SCHILLER: There isn't a golf
14 tournament that starts in five minutes, is there?

15 PRESIDING MEMBER LAURIE: No, but I
16 think there are some legislative hearing that do.

17 MR. SCHILLER: Good afternoon, then.

18 PRESIDING MEMBER LAURIE: Good
19 afternoon.

20 MR. SCHILLER: My name is Steve
21 Schiller, and I'm the president of Schiller
22 Associates. We're a consulting firm with our
23 primary office in Oakland, and we have offices in
24 southern California and Colorado. We provide
25 consulting services to local, state, federal

1 governments, private agencies, private companies,
2 utilities, and other groups.

3 With respect to the PGC programs, the
4 Public Good Charge programs, we're independent
5 administrator in Wisconsin, and we're consultants
6 to independent administrators in New York, out
7 here in California, Colorado, Texas, and soon
8 Oregon.

9 In Texas, I'm on a task force developing
10 the energy efficiency rule, to implement the
11 energy efficiency portion of their new
12 deregulation bill, and in California, as we were
13 discussing at lunch, I have the wonderful title of
14 Vice Chair of the Technical Advisory Committee to
15 the CBEE, which means is I get a nice title but I
16 really don't have to do a lot.

17 And lastly, just as a point of
18 information, we were a unsuccessful bidder, as
19 everyone was, on the RFP process for independent
20 administration last year.

21 I want to speak to a couple points.
22 First, from your list, the need to continue
23 funding. I suspect, as everyone who's here in the
24 room, we believe that there's a need for the state
25 to continue funding based on the economic

1 environmental benefits of energy efficiency.

2 One point I want to make that might be a
3 little different than some of the others is that
4 in particular with declining energy prices, which
5 will be happening, there will be an emphasis in
6 the marketplace for not conservation, but for
7 increased use. I think that's one of the things
8 that we need to keep in mind very much so, is that
9 as energy prices are coming down, which of course
10 is the primary point of deregulation, energy
11 efficiency will be less cost effective for
12 consumers, but not necessarily less cost effective
13 or valuable for society as a whole.

14 And so my feeling is until the energy
15 efficiency is put on a level playing field with
16 consumption, you know, the inclusion of
17 environmental and health costs and the price of
18 energy and the removal of tax breaks and benefits
19 for consumption and production, there will be a
20 continuing need for public funding.

21 Now, with respect to the funding levels,
22 my feeling is that we shouldn't be starting with a
23 dollar amount, but we should be starting with
24 goals. I think right now in the legislation that
25 exists in 1890, it says you will spend so much

1 money. I think that's kind of a somewhat
2 misguided goal, is to say your goal is to spend a
3 certain amount of money. I think the goals need
4 to be tied to a certain level of reduction in
5 energy use, perhaps, like in Texas, tied to a
6 percentage of future growth in consumption.

7 So what I would do if I had the
8 opportunity to do so would be to say our goal is
9 to have a certain percent reduction in the load
10 growth in California associated with coming from
11 energy efficiency versus new supplies. And you
12 can set a KW or KWH level, and from that would
13 flow a budget, a schedule, and privatization of
14 different types of programs that produce results
15 cost effectively and demonstrably.

16 With respect to the goals, I want to
17 speak to something again -- and I'm sorry Mike's
18 not here so he could frown at me -- is to say that
19 very strongly I feel that the goal of the PGC
20 funding is resource acquisition, i.e., the
21 lowering of energy consumption. This has been a
22 goal for many years, and I think continues to be a
23 valid goal. There's been much discussion of
24 market transformation. In fact, it's the mantra
25 of many. However, resource acquisition I believe

1 is the goal and market transformation is the tool,
2 and you shouldn't confuse the tool with the goal.

3 Market transformation activities can be
4 very effective in certain markets and for some
5 technologies, but it's not a cure-all for most, if
6 not necessarily all, of the markets. The reasons
7 I say that is that the market, in my mind, will
8 not be sustainable anytime soon without
9 incentives. You know, we have to remember that
10 within this industry it's all very important to
11 us, but we're really a hair on the tail of the
12 dog, and the big dog that's moving around is
13 dealing with reducing energy costs. And
14 therefore, we're going to have a difficult time
15 when energy costs come down to make energy
16 efficiency a strong and sustainable business.

17 I'm going to move on.

18 DEPUTY DIRECTOR MATTHEWS: Maybe you can
19 -- I don't know if everybody appreciates the
20 differences between resource acquisition and
21 market transformation, what that means.

22 MR. SCHILLER: I think that the way I
23 look at it is that what we're trying to do is
24 simply reduce -- resource acquisition would be to
25 compare getting resources from a power plant

1 versus from a demand site management program. So
2 if we're looking at energy we can either increase
3 the supply from a power plant, or we can decrease
4 the demand for it. The way I've looked at it in
5 the past is that we balance the energy efficiency
6 against the supply, and so instead of building
7 another power plant, as we've been able to reduce
8 the number of those being built in California
9 through demand site management.

10 I still look at that as a primary
11 objective here. If we can make the cost of
12 obtaining the kilowatt hour or KW to be the same
13 or less than for building that power plant, then
14 it's an equivalent to building a power plant, if
15 not better, because of the environmental and other
16 benefits associated with that.

17 Now, with respect to market
18 transformation, there's many definitions for that.
19 But essentially I think they all revolve around
20 coming up with changes in the marketplace that
21 allow energy efficiency to be there without the
22 incentives. And that that be a sustainable and
23 long term solution to that.

24 Now, doing that through various types of
25 programs, such as education programs and such, can

1 be effective. Bringing out emerging technologies,
2 as I think Ed was speaking to earlier, can be very
3 good things. But in certain areas, also as the
4 gentleman from the lighting contractors was
5 talking to, we essentially need to do something to
6 balance the, you know, reduce the cost associated
7 with those measures, and that's through
8 incentives.

9 The classic method we've used in the
10 past, and if you talk to the people in the private
11 sector, they're going to very much continually
12 strive to say we need incentives, whether that be
13 through rebates or standard performance
14 contracting programs, versus coming up with
15 various programs that are developed, you know, by
16 the government to help make the market work
17 better. And for some of us there is somewhat of a
18 contradiction in saying the government can figure
19 out how the market does better.

20 Does that help a little bit? Not being
21 too much of a speech there. Okay.

22 Let's see here. And I want to speak to
23 another one which was timing, which I don't think
24 has been brought up. I think only one person
25 talked about the importance of having really no

1 hiatus rule, is the way I define it. We've been
2 going through a lot of changes with administration
3 and the Public Goods Charge, and the various forms
4 of energy efficiency programs for quite a few
5 years. I think starting with the first energy
6 efficiency working group in '94 and '95 --
7 actually had a full head of hair when I started
8 the process. There's just been a lot of
9 confusion. And so what I'd suggest when you're
10 doing this work is that you include a
11 consideration to not have a hiatus, so that you do
12 a transition, that something is done smoothly and
13 well informed so that the market can continue
14 without having a stop/start, stop/start type
15 approach.

16 One of the things to do this is -- is to
17 look at multiple year funding. And also to use
18 realism in your estimates for how long it would
19 take to actually put new systems in place. I
20 think there's been a lot of over-optimism in the
21 timeframes established for how quickly we can move
22 forward, and often there's no consequences for the
23 people developing those schedules if we don't move
24 forward at that rate. And so that's a grave
25 concern that we have in the private sector, about

1 if you tell us the rules, we can play the game,
2 but if the rules change or we don't know what
3 those rules are, we can't play the game.

4 And the last thing I wanted to talk to
5 was the administrative options. There's quite a
6 few that have been discussed, and I want to talk
7 about three of them, independent administration,
8 the CEC, and non-profits.

9 As I mentioned before, we were a
10 potential bidder, or bidder, depending on your
11 point of view, of the RFP process for the
12 independent administration. Now, I believe that
13 that can still be a very powerful administrative
14 mechanism, to use private companies to administer
15 those funds.

16 First of all, we're talking a lot about
17 having solutions within the private markets. I
18 think that private companies are in the best
19 position to address what happens in the private
20 markets. I think if you provide financial
21 incentives, that really can be tied to results,
22 not just the process. And I think we've been
23 spending a lot of time on the process and not
24 necessarily on the results. And I know sometimes
25 some people think of it as being sinful or evil,

1 or whatever, but if you basically give someone an
2 incentive to do the right thing to generate
3 results, you can be -- results.

4 And just for those who are concerned
5 about we tried that and it didn't work, I think
6 that there was two things that can be fixed
7 associated with the last process. One, frankly, I
8 thought there was a lack of leadership. There
9 really wasn't entities or individuals who were
10 saying we're going to make this happen. We just
11 kept having roadblocks and roadblocks, and I think
12 that could've been dealt with if someone or
13 somebody stood up and said we will make this
14 happen.

15 And secondly, just a sort of real simple
16 thing, there was an RFP process established for
17 that, versus an RFQ process. Essentially, the RFP
18 said fix a cost to something we can't define. It
19 was an undefined scope and they were looking for a
20 fixed price. An RFQ could solve that.

21 With respect to the CEC, I think the CEC
22 has several major advantages as a potential
23 administrator. It's really safe for me to say
24 that as I stand in front of all of you here. And
25 I think those are essentially that, one, you have

1 the staff, which has been an issue with the
2 Utilities Commission. Secondly, you have staff
3 with knowledge. And lastly, and probably most
4 importantly, you have the staff and Commissioners
5 who actually care. And I really can't over-
6 emphasize how important that is, that there's a
7 group that's responsible for the administration
8 that cares that this stuff will happen.

9 We worked for state agencies in New York
10 and Wisconsin in these Public Good Charge type
11 programs, and we've seen the strengths of this
12 approach. I think it can be very effective.
13 However, hopefully I can provide some constructive
14 suggestions to my friends and colleagues about
15 what things I'd say it might be beneficial to
16 change at the Energy Commission.

17 One is that the Energy Commission almost
18 by definition doesn't have a customer connection.
19 You don't have the experience working directly
20 with customers, which is a major advantage of the
21 utilities. That's something that might be able to
22 resolve by working with private sector companies,
23 or perhaps with the utilities in some manner.

24 Secondly, in my opinion, government
25 agencies tend to be rewarded for completing a

1 process, not necessarily for generating results.
2 So sometimes we see delays that are quite endemic
3 to the system.

4 And lastly, as a former and continuing
5 contractor to the Energy Commission, I ask you
6 very much so to overhaul your procurement and your
7 administrative process for contracts. We've had
8 situations where we've been called up and said
9 congratulations, you've been awarded a contract,
10 and two years later we receive the contract in the
11 mail. And that doesn't -- two years taken up with
12 negotiation, that's two years between we get the
13 phone call and we see that contract in the mail.

14 So I think those are three areas that I
15 think if you could work out it would make you even
16 stronger as potential administrator.

17 And lastly, as -- with respect to the
18 non-profit, there's those that see that as a
19 panacea, not the corruption of the private sector
20 and without the politics and bureaucracy of state
21 agencies. But to me, it's just the opposite.
22 You're going to have no clear incentives for that
23 non-profit to produce results, and yet you're
24 still going to have the politics and bureaucracy
25 of a new agency. And for those of us who have

1 been involved with this for a while, we don't
2 really see that there's going to be this new
3 agency created that's going to be also a wonder
4 without difficulties.

5 We already have a number of California
6 agencies and bureaucracies. I really don't think
7 we need another one to handle the Public Goods
8 Charge administration.

9 So with that, thank you very much.

10 PRESIDING MEMBER LAURIE: Thank you, Mr.
11 Schiller.

12 Questions?

13 Thank you, sir, very much.

14 MR. SCHILLER: Thank you.

15 PRESIDING MEMBER LAURIE: Being the
16 first speaker after lunch isn't nearly as bad as
17 being the second speaker after lunch. Gary
18 Nelson. I'm sorry, that's right, Guy Nelson.

19 MR. NELSON: Commissioners, staff,
20 audience. You know, I filled out the wrong card
21 is what happened, but -- but I do feel compelled
22 to speak.

23 (Laughter.)

24 MR. NELSON: Just to reiterate, there's
25 a lot of good ideas that you've heard today, and

1 if I could address a couple of points that you
2 might want to consider in the strategic plan, if
3 that is the direction you decide to go.

4 There's a number of non-energy
5 efficiency benefits to be considered in employing
6 energy efficiency. And among them are safety,
7 health, comfort, and productivity. And if that's
8 a -- I would suggest that you include those as
9 benefits of -- of -- in the strategic plan,
10 assessing those benefits along with the benefits
11 of energy efficiency.

12 And then also, perhaps to help out the
13 local communities, perhaps work with them on a
14 sustaining effort to install as part of the
15 building permitting process a way to encourage the
16 building going in, and the birth of the building,
17 along with how the building is used and finally
18 decommissioned, and what to do with recycling the
19 materials within that building.

20 And perhaps also in the permitting
21 process have a fee rebate kind of process where
22 you actually can reward the -- the building owner
23 for orienting the building correctly, using the
24 right materials, and installing the right
25 equipment in it so that it does operate during the

1 life cycle of the building in a -- in a good cost
2 effective manner.

3 Those are my thoughts.

4 DEPUTY DIRECTOR MATTHEWS: Guy, you
5 might explain who you are for those of us that
6 don't --

7 MR. NELSON: Oh, I'm sorry. I'm sorry.
8 I'm Guy Nelson, with the Utility Energy Forum.

9 PRESIDING MEMBER LAURIE: Thank you, Mr.
10 Nelson.

11 Questions?

12 Thank you, sir, very much.

13 Tyler Bradshaw, please.

14 MR. BRADSHAW: Good afternoon. My name
15 is Tyler Bradshaw. I work for FAFCO in Redwood
16 City, with Ramona Resource Manufacturer. I am not
17 here today representing FAFCO, I'm representing
18 ARI and the Thermal Energy Storage Technical
19 Committee.

20 I wanted to speak about that you have
21 two reports coming up. One is the Transition
22 Report, the other is the Operational Plan Report.
23 And according to a short summary that I gleaned
24 from your Website, one of the items that this
25 report is going to -- report's going to consider

1 is whether eligibility for program funds should be
2 expanded to support the ability of electricity
3 consumers to shift electricity usage in response
4 to pricing differences.

5 And I also wanted to bring up a report
6 that was published by the CEC. I was -- I'm a
7 little surprised that -- in fact, before the first
8 speaker after lunch, that was the first time I've
9 heard of demand type management even mentioned. I
10 think it's pretty important for energy efficiency.
11 And the report clearly points it out. I wanted to
12 point out a couple of things that were brought up
13 on the conclusions page of that report. Since
14 it's your own, I'm sure it's -- each of you can
15 get a copy of that.

16 TES provides major compelling benefits
17 to concern to the CEC. One is energy efficiency
18 to both -- not only to a source, but to site. The
19 other is environmental, which is air emission
20 savings and CFC savings. The other is economic
21 development and competitiveness, increased
22 competitiveness of CEC suppliers and users.

23 Some of the possible action items that
24 were presented in the report. One, make TES a
25 priority demand side management technology in

1 energy policy decisions. Two, modify California's
2 Title 4 building standards to reflect TES savings
3 and peak demand savings. Three, use TES as an air
4 emissions control measure statewide. And four,
5 identify TES as a priority option for new and
6 replacement cooling systems in competitive energy
7 environmental partnerships with -- excuse me, with
8 key energy users such as, one, state, local,
9 federal government buildings; and two, businesses
10 striving to be environmental leaders as in the
11 EPA's Energy Star program.

12 And lastly, I wanted to just read the
13 last paragraph of the report, which is, in
14 summary, the CEC Commission initially believed,
15 and the study confirms, that TES is an energy --
16 excuse me -- is a, quote, energy technology
17 offering compelling energy, environmental
18 diversity and economic development benefits to
19 California, unquote.

20 Moreover, TES is now posed for full
21 commercialization, institutional policies such as
22 those that have been previously identified can be
23 pursued to, quote, effectively increase the market
24 penetration, unquote, of TES as the CEC desires.

25 I just wanted to bring that out because

1 I, in reading about what was going to be brought
2 up in the reports, I don't see any wording for
3 demand side management, and I hope that that was
4 something that wasn't going to be overlooked and
5 something that CEC was going to look into. I know
6 there's a lot of -- certainly I'm here as a
7 thermal source manufacturer, and you might think
8 that -- that my opinion's going to be a little bit
9 biased. That's why I wanted to read from your own
10 report.

11 And sure, there's other technologies,
12 such as lighting, that deserve credit, and
13 certainly need to be looked at for deciding if
14 money's going to be spent for incentives in that
15 area. But I didn't want thermal energy source to
16 be overlooked, because it's very important. I
17 think the report points it out, and I just wanted
18 it to get its due consideration.

19 That's the end of my comments. Any
20 questions?

21 MR. ABELSON: Just one comment, Mr.
22 Bradshaw. Could you identify for the record the
23 actual report that you're citing?

24 MR. BRADSHAW: Yes, I can. The PUB
25 Number is P50-95-005.

1 MR. MESSENGER: And the name of the
2 report?

3 MR. BRADSHAW: The name of the report is
4 "Source Energy and Environmental Impacts of
5 Thermal Energy Storage." The report is published
6 -- was put out in '96, so I don't think it's out
7 of date. It's still a very recent report.

8 Thank you for your time.

9 PRESIDING MEMBER LAURIE: Thank you,
10 sir.

11 Mr. Berman, Mark Berman.

12 MR. BERMAN: Yes. I'm Mark Berman with
13 the Davis Energy Group. And thank you,
14 Commissioners, staff, and audience.

15 For one, I would like to offer my
16 appreciation and -- and thanks to the Energy
17 Commission for having this forum. I know it takes
18 a lot of fortitude and patience to listen as
19 people put forward their opinions and impressions,
20 and I, for one, appreciate that. I think it's
21 needed.

22 A number of comments. One is on the
23 issue of whether or not energy efficiency funding
24 and market transformation funding needs to
25 continue. And I think there is clearly an ongoing

1 role for that. As long as innovative minds are
2 going to continue to come up with better ways to
3 provide comfort, better ways to heat and cool and
4 light buildings, better ways to design them, then
5 we're going to need ways to get these better ideas
6 into the marketplace.

7 The construction industry, in my humble
8 opinion, is fairly staid. They do a good job of
9 what they do, and in my experience there's a
10 reluctance on the part of many of them -- not all,
11 but many of them -- to make changes. And maybe
12 that's for good economic reasons, maybe not. It
13 doesn't matter. There are inducements and market
14 transformation programs, or whatever we want to
15 call them, that are necessary to get new
16 technologies into the mainstream. And that beats
17 the heck out of just making regulatory changes
18 that make people have to do things. It's much
19 better, I think, to have these kinds of programs.

20 So what I'm saying is yes, there needs
21 to be a continued funding level for market
22 transformation, I think at current levels, plus
23 inflation, and I think that will provide good
24 benefits, economic benefits over time.

25 With regard to who administers energy

1 efficiency programs. There's been a lot of
2 discussion about that. At Davis Energy Group we
3 have done contracting with utilities. We've done
4 a lot of contracting with Pacific Gas and Electric
5 in this arena, we've done, as many of you know, a
6 lot of contracting with the Energy Commission, and
7 we've been able to work well with both. I think
8 there are a wide variety of entities that are
9 capable of administering these programs, but I
10 think whoever's chosen to administer them, there
11 are certain -- certain basics that need to be
12 there.

13 One is there needs to be flexibility,
14 perhaps more flexibility in the contracting
15 process that -- than current state law allows. So
16 there may need to be either legislative changes,
17 or it may be that the entity that's chosen needs
18 to be one that has more leeway under current law.

19 For example, a gentleman, one or two
20 speakers ago, mentioned the lag time that can
21 exist from being told yes, you have a contract
22 with a state agency, the Energy Commission as an
23 example, and having that contract be up and
24 running. We've experienced 15 month lag times.
25 And that's unnecessary. I think there needs to be

1 ways to be found to get around it. It's also
2 inefficient.

3 There also needs to be a give and take,
4 and I think this is also perhaps a matter of
5 contracting law. The administrator needs to be
6 able to go to the entities that are running the
7 programs and designing the programs and say, you
8 know, we like your proposal. However, could you
9 change this, could you consider working with so
10 and so. There needs to be the ability to have
11 some negotiation and some back and forth. And I
12 know the -- the Energy Commission is getting ready
13 to work with negotiated contracts in the near
14 future. That's the kind of thing that will be
15 needed.

16 Let's see. There needs to be a
17 mechanism for third parties to come up with
18 designs and programs, so that it's not all top
19 down. And this kind of mechanism is excellent to
20 get input and then design a program, but there
21 also needs to be like third party initiatives, the
22 ability for an outside entity to say we've got a
23 good idea, compare it with somebody else's good
24 idea, pick the one you like best.

25 And then another item that I think is

1 important is ultimately coordination with Title
2 24. Because, for example, with T-8 lamps as an
3 example. There comes a point at which a
4 technology becomes so good and is on the verge of
5 being so pervasive that it makes sense to go to
6 the next step and just say okay, this one is
7 clearly so much better than anything new that
8 gets built you've got to build it this way. So
9 there's a kind of a pipeline from RD&D through
10 market transformation through acceptance in the
11 marketplace, and ultimately to the building code.

12 Finally, I'd like to underscore the
13 comments that Ed Vine from the University of
14 California made about emerging technologies.
15 Right now there is a gap, in my opinion, between
16 the PIER program and the market transformation
17 work that's done. And the market transformation
18 work is emphasizing proven technologies to a good
19 extent, and to a lesser extent emerging
20 technologies. I know this year there's more of an
21 emphasis being placed on having the utilities tell
22 the Energy Efficiency Board what they're doing
23 with emerging technologies. I think that emphasis
24 needs to grow.

25 I think that emerging technologies can

1 really make a big difference. We're not always
2 sure which ones are going to make the difference,
3 but unless there is a conscious effort to get them
4 in the -- in the marketplace and emphasize them,
5 and have programs that are technology specific to
6 get them going, they can get lost.

7 So I would like to suggest that in the
8 January 1 report that is due, I realize you can't
9 put a strategic plan together for emerging
10 technologies, but perhaps some guidelines, perhaps
11 a chapter that begins to think about a strategic
12 plan for emerging technologies would make some
13 sense in the upcoming report.

14 And that's the extent of my comments.
15 Thank you.

16 PRESIDING MEMBER LAURIE: Thank you, Mr.
17 Berman.

18 Questions?

19 I think the reference to the CEC's
20 contracting process is a -- certainly a valid
21 issue. Before the PIER solicitation -- well, PIER
22 had its first solicitation, some months were spent
23 in attempting to streamline the basic terms and
24 conditions. We then find out that part of the
25 process remains that the contract is approved, but

1 then substantial time goes by in working out the
2 work product.

3 Well, my understanding has always been
4 that a contract is a contract is a contract. If
5 you want to modify the contract, you can come back
6 and modify the contract, but if you do then you
7 have to come back to the Commission and get
8 reapproval. So there's a process that we go
9 through of approving standard terms and
10 conditions, and then negotiating the deal is
11 unacceptable. And that is changing, and that will
12 continue to change.

13 MR. BERMAN: And I've had the other
14 experience with the Energy Commission, where they
15 said here's your proposal, we're putting it behind
16 our standard terms and conditions, sign here. And
17 that worked really well.

18 PRESIDING MEMBER LAURIE: That is my
19 understanding of how it was supposed to be. Thank
20 you, Mr. Berman.

21 I'm sorry. Mike, did you have a
22 question?

23 MR. MESSENGER: My question was related
24 to your comment. Do you know if there's -- is
25 there anything that we can do besides what we've

1 already tried to do, in terms of streamlining,
2 that from your perspective would be good to, you
3 know, a different kind of contract, different
4 forms of review, more delegation of powers and
5 authorities. Do you have any ideas about how to
6 do that?

7 MR. BERMAN: Well, the one thing that
8 might be done would be to put a line or a notice
9 in the Request for Proposals that the work
10 statement in the RFP will be part of the contract
11 and that will be the work statement of the
12 contract. And perhaps to say that your proposal
13 or portions of it will be. I think it might be
14 better to stick with the work statement.

15 And then when the winner is chosen, just
16 do that. Take the work statement, put it behind
17 the standard conditions, and that's it. Done.

18 PRESIDING MEMBER LAURIE: Thank you,
19 sir, very much.

20 Should we try Gary Matteson from UC
21 again.

22 Loren Lutzenhiser, from Washington
23 State.

24 MR. LUTZENHISER: Thanks. I'm Loren
25 Lutzenhiser from Washington State University. I'm

1 a sociologist, also a UC Davis graduate, which is
2 how I got into this. I've been studying energy
3 policy, energy efficiency programs for about the
4 last 15 years, and continue to collaborate with
5 folks at Davis and Berkeley and CIEE, looking at
6 these kinds of issues.

7 We've done -- we're now completing a
8 series of scoping studies looking at particular
9 markets that might be candidates for
10 transformation, asking questions about whether we
11 know enough about those markets to advise a group
12 like the CEC to be able to move intelligently into
13 those areas. The markets that we selected in
14 cooperation with CEC staff for this investigation
15 were commercial buildings, residential new
16 construction, lighting, and advanced metering
17 consumer friendly billing. And the first report
18 in that series has been issued.

19 CIEE is in fact funding more advanced
20 research now to take a look at the commercial
21 buildings market to try to determine under what
22 circumstances innovation does occur, and what
23 parts -- what subsectors of the market, what the
24 design negotiation looks like, and how that
25 produces buildings of vastly different energy

1 characteristics, even under fairly restrictive
2 code regimes.

3 The reports in the other areas will be
4 out in the next couple of months, and I'd like
5 very much to supply those to the Commission as
6 well, for you to consider in your deliberations.

7 As a social scientist, I've been
8 particularly interested in looking at how energy
9 efficiency programs have been designed and what
10 their histories are, and particularly to try to
11 understand how things that have to do with humans
12 are taken into account in these programs, which
13 have tended to be hardware focused and subsidy
14 oriented. Having to do with marginal cost
15 acquisition of increments of supply.

16 And in fact, critical success factors
17 for programs such as consumer motivations and
18 behavior and choice, the processes by which
19 technologies are socially shaped, producer
20 resistance to innovation, institutional market
21 based impediments to energy efficiency, and the
22 weakness of conventional policy models to really
23 informed intervention is very well, it has always
24 been puzzling to me. Because, in fact, our
25 understanding of consumers, we've talked about the

1 importance of consumer education, or a producer's
2 willingness to innovate has been critical. And we
3 haven't understood that very well. So that's
4 something that's a mystery to me that I'm trying
5 to understand.

6 Another mystery to me is how so many
7 states could have taken on this notion of market
8 transformation, which is a seemingly radical
9 proposal, and a fairly radical departure, if you
10 want to think about it that way, from sort of
11 standard DSM business as usual, adopted fairly
12 unreflectedly by the Public Utilities Commissions
13 across the country. And now groups like the
14 Commission and the Commission staff are faced with
15 the problem of trying to sort out what exactly
16 this might consist of.

17 So that's another thing I'm quite
18 interested in. And when I get the answer to that
19 I'll pass it along. I don't have it yet.

20 (Laughter.)

21 MR. LUTZENHISER: But it raises an
22 interesting question, because what is it that we
23 really do know about markets. And I have a
24 document that I know Commission staff is familiar
25 with, that I'll pass along.

1 The Energy Center at Wisconsin solicited
2 comments from myself and ten or twelve other
3 folks, include market specialists with
4 manufacturing firms, business professors, people
5 who study markets for a living, people with strong
6 backgrounds in DSM, and posed a series of
7 questions about market transformation. How should
8 it be defined; under what conditions can it work;
9 how should it -- program interventions be
10 structured; can they be evaluated; is there such a
11 thing as an exit strategy, and so on.

12 And they got predictably, I think, ten
13 or twelve different answers to each of these
14 questions, but they've assembled them in a nice
15 way. And I think that there is some fair -- some
16 fair agreement here that, in fact, frequently we
17 don't know very much about the markets that we're
18 talking intervening in. And that the claims that
19 have been made for market transformation have been
20 extremely strong, and quite possibly exaggerated.

21 So I'm going to try to enter that, or
22 I'll give that to you, that can be entered into
23 the process for you to consider, because I think
24 some insights in there are particularly important,
25 and caution, I think, about going in a very

1 deliberative kind of way in this.

2 I have several points that I want to
3 sort of make and toss out, and I won't elaborate
4 on them. It's something we can discuss, and some
5 of these may be provocative, but I'll get them out
6 nonetheless, because I -- one of my roles here is
7 to try to get, I think, some big ideas on the
8 table, or to raise some general questions about
9 this enterprise that we're up to here and in the
10 Northwest, and the rest of the U.S. Because I
11 think that market transformation from the point of
12 view of the scientific community is how the U.S.
13 is now going to attempt to respond to issues like
14 global environmental change and -- and
15 implementing Kyoto, and so on. Taxes are off the
16 table, regulations are off the table, lifestyle
17 changes are off the table. What we have here is
18 market transformation. This is where the action
19 is.

20 So here are a few points that come from
21 my years of looking at this system and thinking as
22 deeply as I could about market transformation, and
23 looking at the specific markets with CIEE and CEC
24 over the last four years.

25 Conventional energy system thinking, and

1 I don't characterize everybody in the energy
2 system this way, or the CEC staff, necessarily.
3 We're trying to think in very creative and useful
4 and broadened ways, I think. But conventional
5 thinking about energy and technology and consumer
6 and producer choice and market systems is very
7 narrow, mechanistic, and I think is often
8 misleading.

9 Despite a number of successful
10 subsidized DSM interventions in the past,
11 efficiency programs have been based on a very
12 limited understanding of humans, technologies, and
13 markets, and as a consequence have very rarely had
14 lasting market effects. And I think we can all
15 think of the exceptions here, and we've heard of
16 some of those.

17 But in general, the transformative
18 impacts of DSM I think have been modest,
19 particularly if we look at the growth of
20 consumption curves for the U.S. as a whole, or as
21 individual states and -- and regions.

22 We did have a good deal of social
23 science research on consumer behavior and
24 technology choice, and community level processes
25 related to energy use that took place in the early

1 1980's. And a number of interventions were well
2 informed by that work at the time. With the
3 advent of DSM, however, that research basically
4 dried up and disappeared. And there's -- there
5 are good policy reasons for that, because given a
6 logic of sort of incremental acquisition of
7 marginal sources of supply with subsidy, you don't
8 really have to know very much about what's
9 motivating people. You know, if you wave some
10 money in front of them they'll take it for one
11 technology or another. You can get some real
12 gains that are measurable in a program evaluation
13 impact context, but you don't have to know much
14 about the process and why it worked and why it
15 didn't. So as a consequence, the knowledge base
16 that we have is fairly old, although I think
17 fairly good.

18 Under a market transformation policy
19 regime, a really thorough knowledge of consumers
20 and producers and market systems will be crucial,
21 I think, for planning, executing, evaluating
22 successful interventions and sorting out the ones
23 that aren't successful and trying to understand
24 why.

25 Our current knowledge of key markets in

1 which transformation might take place, such as the
2 ones we're looking at in buildings, appliances,
3 and so on, is quite limited. If we take a look at
4 the scientific literatures that apply in the area,
5 we find that there's relatively little there.
6 Although it can be usefully brought together, I
7 think, but it's spread across a variety of
8 disciplines. I'll say a bit about that in a
9 minute.

10 I think it's likely to be -- I'll throw
11 this out as something that I can't substantiate,
12 but I think it's likely to be, my hunch, very
13 difficult to convert DSM programs, as effective as
14 they might be in a DSM context, into market
15 transformation programs. This something we're
16 seeing across the board. Our folks who have done
17 a good job at -- at marginal cost avoidance
18 programs in the past, asserting that those
19 programs now will be market transformative in some
20 fashion. Or they've -- always have been market
21 transforming.

22 I think there's questions about where
23 travel down that road will actually lead. I
24 believe that a new sort of theory based approach,
25 and that's been mentioned several times today, is

1 much more promising, one in which interventions
2 are based on plausible program theories and market
3 assessments, and we've heard about the importance
4 of those to try to figure out what's really there,
5 and employ real time evaluation with ongoing
6 program adaptation as opposed to the up or down
7 sort of view that we heard about earlier. And
8 then, in fact, conduct strategic market
9 transformation research to provide missing
10 information on market structure and function.

11 This is not laying the basis for top
12 down programs. This, I think, when I say a theory
13 based approach, and there's a paper that I'll also
14 supply on this, done by Carl Bloomstein at UC, and
15 Sy Goldstone of the Commission, and myself,
16 calling for a theory based approach. What we're
17 simply saying here is that we have to have
18 sufficient knowledge of how a market plausibly
19 might work before we can even start to think about
20 crafting intervention, regardless of whether
21 that's evaluating something that's bubbling up
22 from the bottom, regardless of supporting
23 something that's ongoing in the market, or
24 whatever. This is not a design for a sort of top
25 down approach.

1 The knowledge that we really need to do
2 this is, in fact, greatly dispersed across
3 scientific disciplines and applied areas, and
4 interdisciplinary perspectives are necessary to
5 pull this stuff together.

6 Unfortunately, that knowledge base is
7 pretty well divorced also from the institutional
8 knowledge that we draw on, that comes out of DSM.
9 That knowledge, and there are a lot of people
10 who've been doing DSM who know a lot about
11 markets, I think, but it resides largely in the
12 heads of individuals. It's buried in evaluation
13 reports and gray literatures that we don't have
14 any way to really evaluate or assess or access in
15 any way. Of course, they're proprietary knowledge
16 of consultants. Also, the utility system has
17 periodically gone through downsizing and
18 reorganization and loss of institutional memory.
19 So that the institutional basis of knowledge of
20 how markets work is in some ways scattered, in
21 some senses lost, certainly not coherent.

22 So finally, we believe that -- anyhow,
23 when I say "we", the group of folks in the
24 universities who actually do this kind of work, we
25 spread across the globe. I mean, this tie to the

1 community is relatively small now, but people are
2 doing quite interesting work in Europe and other
3 parts of the U.S. That group has to be brought
4 together with -- with market actors, with
5 technologists, with government program planners
6 and policy makers, in order to support workable
7 approaches to market transformation that will
8 actually work in this kind of an arrangement.

9 I'll be happy to supply my remarks, and
10 these other supporting materials that I think
11 might be of use to the Commission as it goes
12 through the process.

13 MR. WILSON: This morning Michael Parti
14 talked about evaluation and the importance of
15 feedback groups. Is that the same thing as you're
16 calling the theory based market transformation --

17 MR. LUTZENHISER: It's a piece of the
18 theory based approach, and again, that paper is
19 available here. But certainly yeah, it's a piece
20 of it. The theory based approach also approaches
21 -- and some of this work, I work also with the
22 Northwest Alliance a bit, and while it's less
23 systematic there, Tom Eckman, who's one of their
24 leading venture designers, and the Northwest
25 Alliance is something we should kind of talk

1 about, too. I think it's a different situation.
2 It's an interesting and useful model for the CEC,
3 but it's basically a set of private ventures,
4 operating with utility funds, and Bonneville's in
5 that, but Bonneville is not really acting
6 necessarily as a government agency in that case.

7 So they pursue ventures that they are --
8 you have to be based on a good story, and he says
9 a really, really good story is what we want to see
10 before we find an intervention in the market about
11 how the market works. Who the players are, what
12 the institutional context are; what are the
13 regulations; what is the nature of the incentives;
14 what sort of innovation is taking place there now;
15 who are the players, and so on and so forth.

16 Based on that good story, some of which
17 comes from program experience, some of which comes
18 from market actors, some of which comes from
19 scientific literatures that are thin but apply,
20 you can make a judgment about what an intervention
21 or a series of interventions might look like in
22 that market. And then attempt to pilot those in
23 our model, to pilot them to see -- sort of work
24 the kinks out, see what's going to work, see if it
25 works the way you expected. Evaluate it in real

1 time intensely. But in the course of this you may
2 discover that you're running into phenomena and
3 processes, and the Irvine study that the
4 Commission did, I think, is a nice sort of case
5 study or model of how this can work.

6 You may discover processes that are
7 going on there that you don't really understand
8 well enough to make the necessary program
9 adjustments. And that means you need to go back
10 to the theory and you may actually have to
11 commission some research. It doesn't have to be
12 lengthy or -- or painfully detailed, but some
13 serious, on the ground research on market
14 structure and function at that point, to try to
15 better inform the intervention.

16 So it's another process of action in and
17 around the market. The players don't have to be
18 government agents. They shouldn't be. I mean,
19 that should be done by market actors. But the
20 kind of things we should be looking for are things
21 that we're not going to really understand or
22 predict, necessarily, until we actually get out
23 there to find out what are the -- what are the
24 barriers people bump up against, the real -- the
25 impediments that they're encountering.

1 Institutional arrangements, the codes, the laws,
2 the customs and practices in the profession. The
3 networks.

4 And the one thing I do in my research
5 that I'm very impressed with is the way that
6 markets and supply chains don't innovate because
7 of network relations between -- say, take in the
8 residential construction industry. I order for
9 innovation to make its way into that industry, it
10 has to have the cooperation of -- of a number of
11 buyers and sellers who are moving the good from
12 the producer to the -- to the ultimate builder,
13 and so on. It goes through chains of
14 intermediaries who get to sift and sort and decide
15 what's going to come out onto the market on offer,
16 what price, and so on and so forth.

17 And in that industry, it's important to
18 try to develop stable relations with suppliers,
19 particularly when you're in an uncertain
20 situation, as demands for scarce materials and
21 time constraints and growing markets. So you end
22 up settling on these predictable sources of supply
23 and predictable suppliers and all these network
24 relations.

25 Well, okay. That's the case where

1 theory would sort of tell you you should be
2 looking for those kind of things. You get out
3 there and you start finding that some of those are
4 working in ways that you can use, or -- or ways
5 that can pick up an efficient technology and move
6 it along. Others are working at cross purposes to
7 that. And so you use evaluation hopefully to
8 refine your approach, but also you may have to do
9 some original research to really try to find out
10 how it worked better in one context than another.

11 One thing we talked about, take a look
12 at the Building America program that's working
13 across the country, and figure out where it's
14 making a change in industry practice and where
15 it's not. So that's something that we couldn't
16 learn by looking at an intervention in San Jose,
17 for example. But it's a -- it's a track of
18 knowledge development that's important as a part
19 of that whole package.

20 So, yeah, the feedback is part of it.
21 But it's much more than that. It's much more than
22 standard process evaluation or -- or even improved
23 process evaluation and feedback.

24 MR. WILSON: Well, I think one of the
25 challenges of this report is going to be to

1 distill this in a way that the Legislature can
2 understand, because they're the real audience for
3 the report that we're working on. The people in
4 this room are a community of people who have been
5 working on this stuff intensively for -- for
6 probably decades, at least years. And somehow we
7 need to take what we've learned and write it in a
8 way that -- I mean, I wouldn't want to use theory
9 based market transformation to the Legislature.

10 MR. LUTZENHISER: Right.

11 MR. WILSON: Try to avoid the use of the
12 word.

13 MR. LUTZENHISER: Well, it should be
14 something better than a good story, too, though,
15 to give it the sense that in fact a good theory is
16 a good story. You know, as someone once said,
17 there's nothing better than a good theory, you
18 know, as far as -- as far as something to help you
19 sort out what you should do.

20 But I agree. I mean, it has to be -- it
21 has to be intelligible. The idea that we're
22 trying to communicate here is that there are
23 better ways to do it than sort of government
24 bulling into a market and potentially doing more
25 harm than good. Or, on the other hand, simply

1 loosening all of the -- all of the actors whose
2 products and competencies grew up under DSM, and
3 funding them to do whatever it is they do, and
4 then call whatever comes out of it market
5 transformation.

6 That's perfectly okay. And as a policy
7 approach that might be quite efficient. And it
8 will produce marginal energy gains. It will
9 probably not transform markets, if by that we mean
10 to change this sort of underlying structure and
11 function of the market so that energy efficiency
12 is not disadvantaged the way that it is now.

13 MR. WILSON: Well, I think there is a
14 really exciting story here to tell. It's going to
15 be an interesting challenge to write it up in a
16 way that is accessible to people. The -- been
17 working on a memo for several weeks, and it's
18 really exciting stuff to read. I mean, I haven't
19 been deeply involved in this stuff in recent
20 years, but I think we can write a really positive
21 and convincing story for these programs. But it
22 has to be something, again, written, that's going
23 to be understandable to the Legislature, and we'll
24 want them to want to do something legislatively
25 early next year.

1 MR. MESSENGER: I have just a related
2 question. It has to do with audiences, perhaps.

3 Let's assume that the Commission takes
4 as a given that we want to move towards the theory
5 based approach. My threshold question is do we
6 even need to put this -- either of these reports,
7 or could we just simply say later on, when we
8 select administrators we're going to require a
9 theory based approach to evaluation.

10 And so the threshold question I want you
11 to think about is do we need to put all of this
12 fairly technical discussion into a report. And
13 then secondly, if you think so, what level of
14 detail do you think is necessary?

15 MR. LUTZENHISER: I'm not sure that --
16 well, I think there's advantages to having it in
17 there, I think at an appropriate level of detail.
18 By that, I mean if state of the art program design
19 and assessment methods are used, in this case in
20 energy, which they have not been. I mean, if we
21 take a look at what goes on in public health
22 programs, for example, mental health programs,
23 health in general, social welfare programs.
24 There's a much, much greater reliance on theory,
25 and there's much greater reliance on process

1 evaluation and iterative improvement of those
2 programs. And there's much, much greater reliance
3 on parallel research tracks.

4 And so in some ways, if we simply -- but
5 we -- I'm not -- it's not a rap on the energy
6 system. I mean, I've been in this for 15 years
7 and will continue with it. But the point is we
8 have had the luxury of not having to have to
9 proceed in that fashion in the past. Because all
10 we had to do is, you know, buy some electrons at a
11 cheap price, and, you know, we were successful.

12 So I think if what we did was state of
13 the art work in the energy area, then that's what
14 we're talking about. And that could probably be
15 sketched in two paragraphs, I think, what that
16 consists of. Just so nobody makes a mistake and
17 forgets.

18 MR. ABELSON: Just a quick question.
19 The way I hear you presenting the problem, it's
20 that market transformation, whatever that may be,
21 is not something that we fully know how to
22 accomplish effectively. And if we will work on it
23 thoughtfully we can become much better at it.

24 My question is, if that were taken as a
25 given by -- by the report, are you suggesting that

1 the level of dollars that is devoted to market
2 transformation or the energy efficiency programs
3 in the first year of the program in 2002 should be
4 cut until we figure out what is it that we're
5 doing?

6 MR. LUTZENHISER: No. I mean, I'm
7 enough of a political realist to realize that one
8 doesn't cut one's budgets. I mean, presumably it
9 can be used effectively. I'm -- I was surprised
10 and charmed and pleased to -- whenever I come to
11 California, which is frequently, to see the
12 refrigerator rebate programs featured in the
13 newspapers, you know. I assume this is doing
14 good. And I'm assuming that it's having some
15 market effects in the sense that those
16 advertisements are, you know, continually placed
17 before the public, the fact that refrigerators use
18 energy. And that there's a difference between
19 some that use a lot and some that use less, and
20 whatever.

21 So, no, I would never suggest that. But
22 I guess what I would suggest would be that while
23 some degree of business as usual is probably
24 something that anyone's going to be stuck with
25 when you inherit a \$250 million program, that a

1 significant investment in a portfolio of -- of
2 pilot efforts to understand, intervene
3 strategically in particular markets and
4 submarkets, carefully, thoughtfully, in a well
5 funded and appropriately evaluated way, is --
6 would be important. And would be an important
7 contribution.

8 By the way, you can do some free riding
9 in what's going on in the Northwest, because
10 they've been out here for a few years now, in
11 Pennsylvania and the Northeast, and so on. But in
12 fact, that would be a real service, I think, to
13 the rest of the country and the rest of the --
14 rest of the world, too. Because mostly those
15 folks don't have the luxury of the size of
16 budgets, the size of population, the scale of the
17 problem, or the willingness to innovate, to be
18 able to do that kind of work in a really large
19 scale.

20 Now, I think a portfolio approach like a
21 venture capital approach makes sense. And maybe
22 eight or ten of those are going to fail. And
23 maybe market transformation won't work. And a
24 social scientist is interested in historical
25 processes. I'm perfectly willing to believe that

1 15, 20, 30 years hence, all of the work of energy
2 system people to transform markets will have not
3 transformed markets.

4 But I also think that markets are going
5 to have to be transformed if we're going to come
6 anywhere close to doing something like Kyoto.
7 Meeting those Kyoto targets. And while there's
8 some debate about whether that's something that we
9 ought to be doing, the scientific community -- and
10 I count myself as a member -- is unanimous in its
11 belief that those need to be met, and more so.

12 So I think it's an exciting time, with
13 some really exciting prospects.

14 PRESIDING MEMBER LAURIE: Thank you.

15 Loren, I've got a question.

16 MR. LUTZENHISER: Okay.

17 PRESIDING MEMBER LAURIE: Some points
18 have been brought up about -- and I think very
19 relevant, regarding how energy conservation
20 programs can be impacted by the price of energy,
21 and how such programs may be impacted by lower
22 energy prices.

23 Is it your understanding that market
24 transformation programs are thus affected by a
25 balance between price versus intangibles? And

1 then is it a question as to what those intangibles
2 are. What is it that drives the consumer, other
3 than price. And if that can be determined, should
4 moneys be spent on education programs so as to
5 affect market.

6 MR. LUTZENHISER: I think price -- yes.
7 Certainly price has an effect on consumer choice
8 and behavior. Very low prices send the signal
9 that energy is a non-issue. The amount of energy
10 budgets, the amount of people's annual consumption
11 by -- that's represented by energy tends to be
12 quite low. It's higher in California than lots of
13 other places. And when you add commute gasoline
14 costs and so on, it's not an insignificant part of
15 budget.

16 But -- but it tends to be a small enough
17 part that when coupled with the fact that energy
18 is invisible, except with the billing signal and
19 so on, price is hard to interpret and low prices
20 have to go to work against price based strategies,
21 I would think. And that's been a frustration with
22 DSM programs along. Low uptake of stuff, even
23 well subsidized stuff, because the price has just
24 made it irrelevant.

25 With that said, price is interpreted by

1 consumers in a variety of ways. And there's a lot
2 more than price going on here. The recent polling
3 data supports long term trend data that goes back
4 at least 20 years, that show sort of a fundamental
5 shift in thinking about environment in the U.S.,
6 to where the average American now holds an
7 ecological paradigm that only population
8 ecologists held in the 1950's, 1960's. There's a
9 fundamental sort of change in the way we
10 understand the natural world to work, and -- and
11 people are very environmental in their
12 orientation. They're very supportive of these
13 kinds of things.

14 They're very concerned about the
15 environment. We're starting to see evidence of
16 this in the popular press and the popular culture,
17 and so on. The problem, people aren't able to
18 understand how to link their own behavior with an
19 invisible commodity, with distant collective
20 environmental impacts. Drawing those linkages for
21 people is likely to have powerful effects. People
22 are also seizing on green power in ways that were
23 surprising to the -- quite surprising to the
24 utilities, and what not, when given those kinds of
25 choices at incrementally higher cost.

1 I think, yeah, I think that price works
2 in ways that we don't quite understand. Low
3 prices are going to militate against these kinds
4 of things. Price is not -- is not a huge
5 deterrent in this case. In fact, I wouldn't sell
6 efficiency on price. I wouldn't sell conservation
7 on price.

8 I mean, I think a fundamental mistake
9 was made in some of the writing and doing 15, 20
10 years ago, in a way, when the environment -- the
11 big environmental NGOs went to the table and
12 helped redefine energy conservation and its
13 environmental consequences, environmental impacts
14 of the energy system, as simply a matter of good
15 business sense and least cost. Because that one
16 backfired when natural gas prices fell and
17 combustion turbine technology took off.

18 So in lots of -- you know, so there's a
19 need to recapture that connection, I think. But
20 it's part of state policy, I mean, to pursue these
21 kinds of things, I think, and an appropriate role
22 for the Commission to think about this and act on
23 it.

24 PRESIDING MEMBER LAURIE: Thank you,
25 sir.

1 When it comes to actually writing the
2 report, I have heard staff say, indirectly, that
3 in order to assure that the Legislature will
4 understand it, they're going to give it to me, and
5 if I can understand it they are virtually
6 guaranteed that any other reader will.

7 Nobody, again, has directly told me
8 that.

9 (Laughter.)

10 PRESIDING MEMBER LAURIE: Nicole
11 Biggart, from UC Davis, please.

12 MS. BIGGART: Commissioner Laurie and
13 Commissioner Pernell and staff, thank you.

14 I'm -- my colleague, Loren Lutzenhiser
15 -- and we are colleagues, in fact, because we
16 collaborate together and have collaborated on the
17 CEC scoping studies, so you've seen some of our
18 work together. Loren has just raised the issue
19 that you're in the process of transforming a
20 market, but you don't really know what a market
21 is. And so he's raised a problem. And I'd like
22 to suggest that there are some solutions. He's --
23 that the kind of approach where we assume a
24 market, the demand side management approach to
25 markets, has -- is giving way to far more complex

1 understandings of how markets work.

2 I am new to the area of energy research.
3 My primary research has been global comparative
4 economies. I'm an economic sociologist. I look
5 at how social structure influences economic
6 organization and economic action. And a couple of
7 years ago, Loren -- and I'm interested in why,
8 when economists go to marketizing economies like
9 the former Soviet Republic, that the theories
10 don't work very well.

11 And, in fact, there's a lot of -- a lot
12 of evidence to suggest that you don't start all
13 over and structure a new market. That, in fact,
14 that there are social structures, cultures, sets
15 of social relationships that are already there.
16 And if you're going to intervene in structuring or
17 restructuring a market you have to take cognizance
18 of what already exists.

19 And Loren suggested to me a couple of
20 years ago that those are the kinds of ideas that
21 the energy community needed to know about, and
22 hear. And I think he's right. I've got two years
23 now, in fact, working on some of the CEC issues,
24 and I think that you have got to be aware that you
25 are -- you aren't starting with a tabula rasa,

1 that you are starting with a set of actors, a
2 history, political relationships that already
3 exist.

4 While there may not be a lot of
5 information about precisely what a market
6 transformation -- what market transformation is,
7 there are a lot of people and ideas that are on
8 your side. The -- in the last ten years or so,
9 and in part because of changes in the global
10 economy, there -- there's a small but growing
11 group of people who are interested in the
12 structure of markets.

13 So I want to suggest that across the
14 Causeway, you have some friends at Davis and
15 Berkeley and elsewhere in the UC system. And that
16 we -- we are willing to work with you on
17 developing an intellectual -- intellectual
18 partnership with you, to the extent that that
19 seems an -- appropriate to you.

20 Loren misquoted something that -- that I
21 often tell my MBA students. I teach MBA students.
22 They're not -- they're not interested in theories,
23 either. They want to go out and change the world
24 and make a lot of money. But I said that the --
25 the most -- the most practical -- there's nothing

1 so practical as a good theory. That when you go
2 out and act and you don't have a theory, you --
3 you threaten the gods, and all kinds of things can
4 -- can happen to you. So I want to suggest that
5 there are -- there are a lot of people out there
6 who are willing and able to work with you.

7 I have put together a discussion paper
8 that I will give to you, and I will also enter
9 into the -- into the record for your
10 consideration.

11 PRESIDING MEMBER LAURIE: Thank you.

12 Any questions? Mr. Wilson.

13 MR. WILSON: Your opening remarks were
14 quite intriguing. I wonder if you could give us
15 an example of some pre-existing conditions in the
16 market that would affect how we would design a
17 market transformation program.

18 MS. BIGGART: Let me -- as I said, I'm
19 relatively new to this, but let me talk about a
20 study which we are just undertaking on commercial
21 -- on commercial buildings market.

22 We were presented with the idea that the
23 technology that exists to make energy efficient
24 buildings, there's much of it is out there that's
25 not being used. And you'd think that if actors

1 were rational they would do something to lower
2 their -- their energy costs. But the commercial
3 buildings market is not -- is not so simple, that
4 there are a wide range of factors, social and
5 political, that -- that influence why those
6 technologies are being adopted.

7 And I will just rattle off a few for
8 you. One is if a -- the fact that the trades
9 cannot necessarily install a new technology if the
10 -- if the apprentice programs don't in fact teach
11 them how to -- to install those things. Differing
12 trades have politics between them. They don't
13 necessarily work together, particularly in
14 adopting innovations.

15 The architects and the engineers who
16 design buildings don't necessarily work together.
17 Architects have a very different occupational
18 goal. It's often aesthetic. Whereas engineers
19 want to make buildings that work and that are
20 reliable. And those two things don't necessarily
21 work together.

22 You have mortgage markets that will not
23 lend on buildings that do not have -- have
24 traditional technologies. Innovative
25 technologies, they're not particularly interested

1 in. Or else they'll charge you a higher mortgage
2 rate. Building code inspectors, building codes
3 and then the inspectors, will only inspect for
4 technologies that they understand. So buildings
5 which use 30 percent of electrical energy aren't
6 as efficient as they could be, but it's not just a
7 matter of price, or the cost of energy. There are
8 a whole range of -- of relationships between the
9 actors that put together -- put together and
10 utilize commercial buildings.

11 And unless we build a theory based on
12 the empirical reality of how -- how the commercial
13 building market is put together and who those
14 actors are, and what their relationships are to
15 each other, we're going to -- we're not going to
16 get very far.

17 PRESIDING MEMBER LAURIE: Thank you very
18 much.

19 The reason those comments are so
20 intriguing is that they're true.

21 (Laughter.)

22 PRESIDING MEMBER LAURIE: We may want to
23 consider including such in our report.

24 Mr. Sperberg.

25 MR. SPERBERG: Thank you very much. I

1 appreciate the opportunity, Commissioners and
2 staff, advisors and audience.

3 My name is Richard Sperberg. I'm the
4 Chief Executive Officer of Onsite Sycom Energy
5 Corporation, which is an energy services company,
6 California based. I'm also -- I have the pleasure
7 to be the current president of the National
8 Association of Energy Service Companies, which is
9 our national trade organization, which is involved
10 with advocacy at both the federal and the state
11 level. And I'm here in both the capacity as the
12 president of my own -- or CEO of my own company,
13 as well as president of NAESCO.

14 NAESCO has filed brief comments, and I
15 will try to be brief, as well, today.

16 I also happen to represent as one of our
17 subsidiaries a lighting services company, which is
18 related to some of the comments that you -- you
19 heard earlier.

20 On the -- on the first issue, which is
21 the need for programs, I will add our voice to the
22 many voices that you've heard today, that there is
23 a continuing need for these programs past the
24 transition that has been identified. I think
25 energy efficiency is, and has proven to be good

1 public policy, not only for economic benefits,
2 which Rich Ferguson has pointed out and I -- I'm
3 very intrigued by his analysis because it does not
4 represent participant benefits. In other words,
5 that -- that seven and a half cents a kilowatt
6 hour that he is talking about is benefits to the
7 overall system from an economic standpoint, in
8 just the lower price for kilowatt hours.

9 And I think that should be explored in
10 terms of the economic benefits that energy
11 efficiency brings to the overall system, but also
12 because of the externalities that everybody's
13 talked about, and that continue to be very
14 important to the -- to the state and to the world,
15 in terms of the environmental benefits and other
16 benefits.

17 But market barriers still exist in our
18 marketplace, and, as well, the market structure
19 involving suppliers and customers is still
20 fragmented and immature. And that's one of the
21 reasons why public policy is well served by
22 continuing to support and try to overcome these
23 barriers.

24 As we go to administrative structures, I
25 think that our principal guidepost and the

1 principle that you should consider while writing
2 the report is to minimize administration, and
3 encourage the natural market to operate, which are
4 customers making decisions to implement energy
5 efficiency, as well as suppliers making decisions
6 to supply and making money at -- and profit, that
7 evil word, profit, in actually supplying those --
8 those services.

9 I also think an important part of the
10 administrative structure that you should consider
11 is not to ignore the value of the existing
12 expertise and motivation within the utility
13 administrators. One of the things that I have
14 come to appreciate is that the utilities, as
15 they've administered the programs over a long
16 period of time and under a very different
17 regulatory framework, have accomplished incredible
18 results. Not only in terms of the actual savings
19 that have been produced over the years, but also
20 in terms of the creation of programs, and
21 actually, in many cases, the implementation of
22 those programs under that model.

23 They've also made very significant
24 progress, I feel, in the last several years, the
25 last couple of years, since AB 1890 was -- was

1 passed. They have successfully, or in many cases
2 made substantial progress towards moving away from
3 a program implementation and command and control
4 and design, and much more towards a program
5 administrator. And I think they should be
6 complimented on the progress that they've made
7 towards -- towards the -- towards becoming
8 administrators rather than implementers.

9 I also want to point out an issue which
10 is sometimes -- I've been thinking about, and I'm
11 not sure whether I have it all right, but even if
12 you do shift administration of these energy
13 efficiency programs away from the utilities,
14 there's still a conflict, and many people point
15 out that this -- you've got this inherent conflict
16 that you want to sell more kilowatt hours, how can
17 you possibly do a good job of saving kilowatt
18 hours. But even if you do shift the
19 administration of these programs away, the
20 conflict still remains.

21 So combined with the administration of
22 effective energy efficiency programs, there needs
23 to be a coupling of -- and examination of the
24 regulatory aspects. And this is where you, the
25 Commission, should work very closely with the

1 parallel commission which is -- will continue to
2 regulate the distribution company, and try to make
3 sure that from a future regulation standpoint,
4 that the utilities are at least neutral, if not
5 positive, towards the implementation of energy
6 efficiency.

7 I think the other reason that the
8 utilities will be important is that they will
9 continue to be, even as utility distribution
10 companies that are not involved with the
11 generation of kilowatt hours, they'll have an
12 important role with the customers as both a
13 credibility source, as well as a continuing
14 responsibility to service those customers. I'm
15 not one to say that the best way to administer
16 these programs is the utilities, but I think in
17 your difficult task of looking at the future, that
18 we should take advantage of some of these -- some
19 of these values.

20 I also think that the solution that you
21 might also consider is that there may be different
22 models, different administrative structures for
23 different marketplaces. The market actors and the
24 -- the barriers that are present in different
25 markets may call for different type structures. I

1 know recently, since many of our members of the
2 National Association of Energy Service Companies
3 service the residential sector, they see a much
4 more important role that the utilities serve, as
5 the source of information for the smaller
6 customers. Whereas in the larger commercial and
7 industrial sector, the utilities are not as
8 important as a source of information, but have
9 been effective administrators. So you might
10 consider different models for the different --
11 different types of markets.

12 As far as transition issues and things
13 that you should consider, or we suggest that you
14 consider, I agree with many of the speakers from
15 earlier, and especially with the lighting company
16 representative, that continuity and stability are
17 very important in the marketplace.

18 The project development cycle for our
19 business is a very long one. We start, and some
20 people have given examples of contracting with the
21 CEC. I -- I parallel my own experience of
22 contracting with private customers, when it comes
23 to both convincing them that energy efficiency is
24 okay, and then ultimately getting their attention
25 long enough to sign a contract. So the project

1 development cycles are long.

2 Industry investments, which my company
3 is making and other of our members are making in
4 this industry and in the marketplace, are based on
5 long term desires, and long term goals of
6 profitability. So my suggestion is that you also
7 allow the programs, as they get instituted, time
8 to work.

9 I think that you should also consider
10 continuing programs that involve private
11 providers. Obviously, that's an important part of
12 the goals that ultimately you have, and the
13 Standard Performance Contract is one of those
14 programs. One of the -- some of the factors that
15 lead me to that conclusion is -- one is we provide
16 comprehensiveness. We do provide -- when we go
17 into a building, we look at all of the
18 opportunities for energy efficiency. And so we
19 gather some of the lost opportunities that some of
20 the other segments might lose if they just go in
21 and, for example, retrofit the lights or retrofit
22 the chiller, versus looking at the building as a
23 whole.

24 We also provide creative solutions. In
25 many cases we combine technologies and we look at

1 ways in which technology can be put together in a
2 creative way to solve not only the energy issues
3 of the buildings, but -- and the users, but also
4 their operational issues.

5 We also represent a part of the industry
6 that stands for measurement of savings. So when
7 we implement a project, most of our projects are
8 based on actually delivering those -- the results
9 of the actual savings, and standing by those,
10 either in a guarantee or in a performance based
11 contract.

12 And I -- I was writing notes down here,
13 and one of the previous speakers stimulated
14 something else, and that is I think the ESCO
15 industry also represents a very effective
16 mechanism for introducing new technology. So as
17 new technologies are -- are proven in the lab or
18 demonstrated in pilot programs, the ESCO industry
19 is willing to take risks because of their
20 experience and their familiarity with technology
21 that individual customers might not be willing to
22 take. And so as a performance contractor, and as
23 that mechanism, it might be an effective thing to
24 consider as you go through your deliberations.

25 I think in closing, I want to just point

1 out that I -- I will not respond to Mr. Link's
2 comments about the relative merits of the rebates
3 and the Standard Performance Contract. Although I
4 disagree with his conclusions, he had some very
5 important input that I think you need to consider.
6 And I think there will be ample opportunity in
7 future workshops and future parts of this report
8 to examine the specific program issues. I think
9 we agree on a lot more than we disagree on.

10 So, again, I appreciate the opportunity
11 to address you, and I'll be available for
12 questions.

13 PRESIDING MEMBER LAURIE: Thank you,
14 Rich.

15 Mr. Miller. NRDC.

16 MR. MILLER: Good afternoon. My name is
17 Peter Miller. I'm representing the Natural
18 Resources Develop -- Defense Council. And
19 everybody else gets it wrong, I guess it's about
20 time I got it wrong.

21 (Laughter.)

22 MR. MILLER: And thank you for the
23 opportunity to speak today.

24 What faces the Commission now is an
25 enormous opportunity. But it's an opportunity

1 that is easily squandered. I'm trying to think of
2 an apt metaphor, and I think -- let me try one
3 out. It doesn't quite hang together, but from the
4 distance of 90 miles, I think it's possible to
5 look at the energy efficiency programs that have
6 been run under the aegis of the PUC over the past
7 15, nearly 20 years, and as if it were a big white
8 ball that -- up in the air, and all the parties
9 over there have been able to keep it up in the
10 air. It looks so easy from a distance, that it
11 must be a balloon.

12 And when it's passed over the Energy
13 Commission, the perception might be well, here it
14 comes, don't worry, it's a balloon, it's kind of
15 floating by itself, and it's easy. But it turns
16 out that that's an egg out there, and it's
17 actually been taking quite a bit of effort and
18 skill to keep that thing alive.

19 And it can be easily dropped, and once
20 dropped, not recoverable. And I think it's
21 important to recognize that these programs are
22 something that will take a tremendous amount of
23 effort, skill, and expertise to keep in the air.
24 And while all parties included agree that there's
25 a tremendous need for these programs without the

1 political consensus and support, and record of
2 success that -- that we've enjoyed in the past,
3 that continued funding is not assured. And
4 continuation of the programs is not assured.

5 And so I think it's important to
6 recognize, to -- to give appropriate weight to the
7 effort that it's going to take to continue with
8 these programs.

9 I think it's also important to recognize
10 the record of success that we've enjoyed, and not
11 to diminish that in any way. We were one of those
12 environmental NGOs that promoted the programs and
13 have supported the programs over many years. And
14 in no way do we feel that there's been a failure
15 as a result of that effort. And in fact, compared
16 to other environmental programs, other public
17 programs that have been funded and supported over
18 many years, we think that energy -- the energy
19 efficiency programs in the state, in particular,
20 have -- can hold their record up and -- with
21 pride. I think we've accomplished a tremendous
22 amount, and we've really set both a national and
23 an international model to be emulated, and hold
24 the best promise for achieving the goals of Kyoto
25 and protecting the planet from global change,

1 global environmental change.

2 So I think we've got an important record
3 of success. We've saved a tremendous amount of
4 energy. We've saved a tremendous amount of money.
5 We've protected the environment, and we've
6 transformed markets, both in the state,
7 nationally, and internationally.

8 Given this record of success, and the --
9 the fragility of the programs, and their uncertain
10 future, I think that the byword should be
11 evolution, not revolution. We've got a record of
12 success, let's move forward, let's continue to
13 make changes, and there have been continuous
14 changes in program design, in program
15 administration, over 15 to 20 years that they've
16 been in place.

17 I've heard people refer to business as
18 usual, energy efficiency business as usual, DSM.
19 There's no such thing. It's -- there's been a
20 continual change, and there is no traditional way
21 of doing things because things have changed pretty
22 dramatically, if not every year, then every other
23 year. So I think it's important to emphasize
24 continuity and stability, and particularly so in
25 this state, in which there's always new ideas and

1 -- and innovation around the corner.

2 So let's not discourage the new
3 innovation, new ideas. Let's harness them, but
4 let's do it in a stable framework that can allow
5 the market players and the industry to thrive.

6 On that note, where are the -- the
7 leading -- where should we focus in the years
8 ahead, and I think I'd offer three highlights.

9 One is national collaboration. The
10 biggest opportunity in terms of program design
11 that's facing us in the years ahead is the fact
12 that there are other regional and national
13 organizations in place, with funding, running
14 programs that are interested and already in some
15 cases collaborating with the California programs.
16 We can achieve a tremendous amount by working with
17 these groups. The Northwest Alliance, the
18 Northeast effort, national programs through EPA
19 and DOE, and elsewhere in the country, there's new
20 funding available in New York, New Jersey, other
21 states, and there's a tremendous amount that we
22 can accomplish by working together.

23 We have a fair amount of money available
24 for programs here, but we can leverage it by
25 working with other groups.

1 Market implementation. Take advantage
2 of those market actors, and you've heard from some
3 of them today. We've got a -- I think beyond a
4 fledgling industry. We've got an industry that's
5 getting up and running, that can accomplish a lot.
6 Use them. Work with them. Use market actors to
7 implement programs. Help them develop, help them
8 stand on their own two feet.

9 And, three, program coordination. As
10 the people in this room and on the panel are well
11 aware, there are other programs that we need to
12 coordinate with. Title 24 building standards
13 program, the PIER research program, and the
14 Renewables program. All of which have aspects
15 that would benefit from coordination with energy
16 efficiency program, and vice-versa.

17 On the question of administration. The
18 -- I don't have a solution or a proposal to offer
19 today. But the one point I'd like to make is that
20 the -- the distribution utilities, I believe, will
21 have a role to play in the future. They are going
22 to continue to provide, to distribute and be the
23 people that control the wires that deliver
24 electricity to homes, and they are the people that
25 -- they are the company, the institution that if

1 someone has a problem with their electricity,
2 they're the first person they're going to call.
3 If they have a question about energy efficiency,
4 they're going to continue to call them. If we
5 want to incorporate the benefits of energy
6 efficiency into distribution system expansion and
7 planning, they're the people who are going to have
8 to play a role.

9 So there is an important and essential
10 role for utilities to play. They're part of the
11 market, they're part of the industry, and they --
12 I guess the final point, there's a tremendous
13 amount of expertise and experience and stability,
14 in terms of administering programs. So I think
15 it's important to consider and to fully value that
16 role.

17 That's all I have today. I'd be glad to
18 answer any questions.

19 PRESIDING MEMBER LAURIE: Questions of
20 Mr. Miller. Mr. Abelson.

21 MR. ABELSON: I have just a quick
22 question on the coordination with other programs.
23 You mentioned the renewables program, and earlier
24 today one of the speakers also mentioned the
25 importance of not overlooking distributed

1 generation as it applies to energy efficiency.

2 As I understand the way AB 1890 was
3 written, the renewables program only has a four
4 year life, at least in terms of that legislation.
5 Do you believe that this Commission is part of
6 whatever it's talking about and the transition
7 report for energy efficiency ought to in some way
8 suggest there's a need for continuation in the
9 distributed generation, or renewables, as it
10 relates to energy efficiency?

11 MR. MILLER: I'm not sure that this
12 report is the appropriate place to ask for
13 continued funding, but I think it would be
14 valuable to point out the potential synergy from a
15 renewables program and an energy efficiency
16 program in the future.

17 MS. LEWIS: I have a question. You
18 talked about national collaboration --

19 PRESIDING MEMBER LAURIE: Kae, would you
20 use the microphone, please?

21 MS. LEWIS: Oh, I'm sorry.

22 You were talking about national
23 collaboration. Are you talking about something
24 more than say just sharing ideas on program
25 design, or are you perhaps referring just to

1 actual, you know, regional type programs?

2 MR. MILLER: The latter. I believe that
3 there's a tremendous opportunity, first by
4 starting with sharing program ideas. And not just
5 program ideas, all aspects of the effort,
6 measurement and evaluation, administration and
7 programs, but the implementation across regions,
8 across states, and nationwide. Yeah.

9 MR. MESSENGER: As has already been --
10 one of the issues that I think is a typical one
11 for us to wrestle with in this report is to what
12 extent we should consider funding for load
13 shifting programs, as opposed to the more
14 traditional energy efficiency programs. And -- or
15 whether that function should be left to the UDCs,
16 in terms of the way that they manage the -- the
17 load on their distribution system.

18 Do you have any policy position one way
19 or the other in terms of whether we should be
20 looking at devoting more funding towards load
21 shifting programs as opposed to straight baseload
22 efficiency?

23 MR. MILLER: I think that this is an
24 important point. It brings up a very important
25 issue about the objective of the programs, the

1 goal. And I think it's important to be clear that
2 the objective of the program should be energy
3 savings. Saving energy, because of the benefits,
4 economic and environmental benefits that that
5 provides. The goal should not be a market
6 transformation. The goal is not understanding
7 markets. The goal is not helping a utility manage
8 its -- its distribution system. The goal is
9 energy savings, because of the economic and
10 environmental benefits that provide.

11 There are a variety of tools to that,
12 and I see market transformation as one of those.
13 But in general, we should be trying to accomplish
14 as much as possible for as little as possible.
15 Leverage our available funds to accomplish as much
16 as possible. And if market transformation
17 theories provide a way to do this, then that's
18 great.

19 I don't see load shifting as providing
20 those -- those essential benefits. I think that
21 there are also concerns in terms of the likely
22 sectors that that would be provided in, since from
23 my experience, that the greatest potential there
24 is really in a large commercial industrial sector,
25 and there's little real opportunity in terms of

1 residential benefits.

2 But I'm willing to be open minded on
3 that.

4 MR. WILSON: Peter, Congress is
5 currently considering restructuring legislation,
6 and different bills have different elements, and
7 Public Goods elements in them. Do you think the
8 Commission should use this report to take a
9 position on sort of a national Public Goods Charge
10 for energy efficiency, and use this as an
11 opportunity to urge the Legislature and the
12 Governor to take a position?

13 MR. MILLER: I don't know if that's --
14 if it's the appropriate place. I guess my initial
15 thought might be to keep the report focused,
16 you've got a lot to do in the next six months to
17 get this report -- I take it back, not six months.
18 I think it's about five months, or maybe four and
19 a half. Time is ticking.

20 (Laughter.)

21 MR. MILLER: So if you can get the
22 report done in time and you have a couple of extra
23 weeks, sure.

24 (Laughter.)

25 PRESIDING MEMBER LAURIE: Thank you,

1 Peter.

2 You know, I was much relieved when you
3 were discussing your analogies of balloons and
4 eggs flying over the Commission. Normally, when
5 the Commission looks out on the horizon and sees
6 items floating towards it, they are normally
7 either in the form of a large bird, or in some
8 cases giant elephants, and so when we only have
9 eggs flying over we are much relieved.

10 (Laughter.)

11 PRESIDING MEMBER LAURIE: Thank you.
12 Timing is an issue. This is September. This
13 report will not be late. So we do not have six
14 months, we have two to three months to get this
15 baby written. So time is an issue.

16 Thank you, Peter, very much.

17 MR. MILLER: Thank you.

18 PRESIDING MEMBER LAURIE: Thank you.

19 Tony Dunn, please.

20 MR. DUNN: Good afternoon. My name is
21 Tony Dunn. I represent the Sierra Energy Center,
22 which is a new rural energy efficiency center that
23 just opened up in Sonora. It's a partnership
24 between Pacific Gas and Electric and the Economic
25 Development Company of Tuolumne County. So you

1 can probably imagine my --

2 PRESIDING MEMBER LAURIE: I'm sorry,
3 partnership between --

4 MR. DUNN: Pacific Gas and Electric and
5 the Economic Development Company of Tuolumne
6 County.

7 PRESIDING MEMBER LAURIE: Thank you.

8 MR. DUNN: And my salary comes directly
9 from the Public Goods Charge, so I think you
10 probably know where I stand on the future of the
11 programs.

12 (Laughter.)

13 MR. DUNN: I think they should be ended
14 immediately. The money could be better spent
15 elsewhere. Never mind that.

16 Actually, I come here with more --
17 actually a lot more questions and concerns than I
18 do comments, but I'm going to limit myself mostly
19 to the comments, because I have the impression
20 that nobody really has a lot of answers yet to the
21 questions and concerns I have.

22 But I do have some concerns as far as
23 the administration of the energy efficiency
24 programs in the future. As a small, rural
25 community I'm concerned about the way that

1 programs will be evaluated as far as their
2 viability in the future. If it goes strictly on a
3 dollar spent per kilowatt hour saved for programs,
4 it's really going to be a problem for rural
5 communities such as Sonora and a lot of other
6 areas in California, because we really don't have
7 very many people, except that the people are
8 contributing to the Public Goods Charge. And if
9 programs aren't available somehow to represent
10 those people, then that's money that's leaving
11 their economy that they're contributing to, but
12 they're getting little or no direct benefit from.

13 And I think that that needs to be
14 considered in how the program is administered in
15 the future, with respect to how the decisions are
16 made, who decides and how, what criteria do they
17 decide, of what energy efficiency programs are
18 viable. Who is going to be funded, and who is not
19 going to be funded. And I'm not particularly
20 concerned in the short term. I was told
21 explicitly when I was hired that we had money for
22 maybe a couple of years, and then it was going to
23 be a different world and we didn't know what that
24 was.

25 So I'm not concerned about my own

1 personal future, but I am concerned about how --
2 how -- what sort of fair and just system for
3 distributing these funds, how people are going to
4 be represented, and what the criteria for
5 representation of what these funds is going to be.

6 One of the advantages of the Sierra
7 Energy Center is that as a partnership -- I don't
8 actually work for PG&E, I just want to make that
9 clear. As a partnership with the Economic
10 Development Company, our goal is energy efficiency
11 through economic development. So we are working
12 very hard with the businesses in Tuolumne County
13 to develop their -- develop the economy, not
14 rampant development, but to use energy efficiency
15 as a tool to boost the business of the contractors
16 and the retailers. And at the same time, to save
17 money for the commercial and residential consumers
18 of electricity.

19 And I think that's really a dynamic
20 model that, to me, has really struck me as a
21 stroke of genius. It has provided us with access
22 to so many people and so many tools, and that
23 we've been so well received. And I think that
24 that's something that you might want to consider
25 as incorporating, that energy efficiency doesn't

1 have to stand alone as the approach to this
2 program. By tying it in with economic development
3 in Tuolumne County, we've met -- we've only -- we
4 opened a month ago, so, but in that month, we've
5 met with incredible success. People are really
6 interested because we offer them not only a way to
7 be energy efficient and save money through that,
8 but also a way to develop the economy of the
9 county and of the businesses.

10 So we're offering people, as you know,
11 the market is not necessarily rational when you
12 try to tell people the way you can save money by
13 doing these energy efficient retrofits, and they
14 don't necessarily buy it. They -- but we're
15 offering them something else, something
16 synergistic. We're getting people excited about
17 the fact that we're working with the economy.
18 We're working with the businesses. It's a small
19 community. Everybody knows everybody. And they
20 want to participate.

21 So the point is that don't think of
22 energy efficiency as something that's by itself.
23 It's part of a greater picture. It's part of the
24 whole community. And in other areas, in other
25 markets, it may not be economic development that

1 is the key to tie it in. It may be something
2 else. But however this program is administered
3 and however you think about it, please do not
4 think about energy efficiency as some sort of
5 stand alone issue. It can be much more successful
6 if you tie it in with another issue that it can
7 synergize with.

8 And I also wanted to comment a little
9 bit about the role of the utilities, and the
10 future of the program. Some comments have been
11 made. The impression that I've kind of gotten,
12 and I may be wrong, and I don't -- necessarily
13 don't want to stigmatize anybody with a particular
14 viewpoint. But I -- it seems to be the industry
15 people who are saying well, the utilities have a
16 role. And what I hear from the governmental side
17 is more that that's not really considered, it's
18 more thinking about setting up a non-profit or
19 doing something governmental.

20 And I just want to share my personal
21 experience. Working with Pacific Gas and
22 Electric, is that I have been extremely impressed
23 with their commitment to energy efficiency and
24 energy efficiency programs. And I see a lot of
25 problems in setting up a new organization, whether

1 it's governmental or a non-profit, in dealing with
2 that.

3 The first one is whoever you use, they
4 do not -- whoever, whatever future mechanism you
5 choose to use, whoever it will be will not have
6 the history of customer contact and consumer
7 dealing that the utilities will have. And that is
8 going to be an issue. The utilities have
9 developed years and years of experience dealing
10 with the consumers in energy efficiency programs,
11 at all levels. And PG&E, I can't speak for the
12 other utilities, has, to me, anyway, demonstrated
13 an incredible commitment to providing good energy
14 efficiency services to the customers.

15 I'm not advocating that they maintain at
16 the way the programs are. But I just want to say
17 that they have done, in my opinion, a very good
18 job.

19 And I think in the future, they --
20 they're going to have to participate at some
21 level, maybe in a transition, maybe you will want
22 to go to a non-profit organization, or a
23 governmental agency -- I hope not a governmental
24 agency, personally -- to oversee it. But I think
25 that they need to be involved in the transition.

1 I think that, as some of the industry people have
2 been saying, that the stability and continuity is
3 extremely important, and that just wrenching the
4 program from being administered by the utilities
5 to somebody totally different is going to cause a
6 discontinuity which will cause a lot of problems.

7 I am sort of on the front lines. My job
8 is to get the Public Goods funds to the consumer.
9 I talk to the businesses, I talk to the
10 residential customers and say there are programs
11 out there that can help you get energy efficient,
12 that can provide you with tools and resources and
13 financing. And by changing that structure
14 overnight, it's going to make it confusing. For
15 me, I can handle it, but it's going to make it
16 more confusing for the customers who say well, I
17 understand there's a rebate program on
18 refrigerators. Oh, that's gone now.

19 And I know there's been a lot of changes
20 over the years, you know. It's a constantly
21 evolving thing. And that is -- causes confusion.
22 And that is one of the contributing factors why
23 participation maybe is not at the level that we'd
24 like to see, is because there is a lot of change
25 constantly. And by making a major change in the

1 short period of time, I think it's going to have a
2 negative impact on energy efficiency programs.

3 Another question I have is no matter who
4 administers the program, whether it's the
5 utilities or independent operators, or whoever,
6 success in market transformation means their
7 demise. I think you need to realize that. My
8 job, my goal is to really put myself out of
9 business, and I realize that. I want to see
10 energy efficiency be such a part of the economy in
11 Tuolumne County that I'm not needed anymore. I'll
12 get a job with the CEC or something like that. Do
13 something else.

14 But if you start a non-profit company to
15 do this, they're -- if they are successful, truly
16 successful with market transformation, whatever
17 that is, and I certainly don't know what it is,
18 then that means that they will come when they go
19 out of business, or should go out of business.
20 And as a governmental agency, we know how -- how
21 eager governmental agencies are to put themselves
22 out of business. Even the utilities, I'm sure
23 that they wouldn't want to see themselves put out of
24 business.

25 Whoever runs this, you have to

1 consciously realize that success means an end to
2 their job. And that has to be built in somehow,
3 some recognition of that, that gives them an
4 incentive to be successful. I don't know what,
5 you know, job retraining or something like that.
6 But nobody, you know, it's not going to take
7 somebody that's very bright to get involved in
8 this and realize, god, if we really do this job,
9 I'll be out of a job. So please consider that.

10 And those are kind of a scattering of
11 comments, but those are all I have.

12 Thank you.

13 PRESIDING MEMBER LAURIE: Thank you, Mr.
14 Dunn. Thank you, sir. Comments are appreciated.

15 Chris Chouteau, PG&E.

16 MR. CHOUTEAU: Good afternoon,
17 Commissioners and staff. Some old friends, and
18 some new faces.

19 Just a couple of quick comments. First,
20 I think because of the charge you have to write
21 this report, which has the potential to shape
22 energy efficiency for the next leg of the journey,
23 however long that may be, that it be important and
24 incumbent on you to really do due diligence about
25 what it is you're receiving.

1 And to give you the good news, when I
2 think of Peter Miller's egg, it's actually not
3 coming at you through the air and you're figuring
4 out how you're going to catch this thing without
5 getting it on your face. It's trucked to you.
6 It's nicely, carefully packed, refrigerated
7 trucks, very large big rig, \$250 million big rig.
8 What I want you to know is it doesn't handle like
9 a Ferrari. You know. If you want to make quick
10 turns, quick acceleration, deceleration, you're
11 going to smash the eggs in the back for sure.

12 It also is perishable. It doesn't park
13 well. You want to park it, leave it overnight,
14 and figure the theory out, the eggs are going to
15 be no good by the time you get them to the
16 consumers. So you've got to keep the rig moving,
17 you've got to realize that it's big and steer it
18 slowly, with some kind of longer vision down the
19 road, longer lead time.

20 The second thing I want to talk about is
21 customers. I missed a couple of hours this
22 morning, so I don't know if you've heard from a
23 customer, but I'll bet you haven't. And these
24 proceedings aren't customer friendly, and yet
25 customers are where these programs succeed or

1 fail, ultimately. And there's a lot of people who
2 put a lot of energy and a lot of dollars into this
3 business, but it's the customer making the
4 decision in the end that really makes us
5 successful or not successful.

6 So I think it's really important that
7 you find a way to get the customer input. And
8 these hearings are, you know, these hearings are
9 difficult for customers to deal with.

10 So I have some ideas about that.
11 There's a lot of market data, there are focus
12 groups that, you know, and current administrators
13 have data. But I think it's also important that
14 you hear from customers and find ways of, you
15 know, through letter, through written comments,
16 through outreach, to incorporate their concerns
17 and their thoughts about this change.

18 The third thing I wanted to talk about,
19 market players. And you've heard from them today.
20 They're really key to the success of these
21 programs. The energy service companies, the
22 vendors, the manufacturers, the contractors, the
23 retailers, these are people who build their
24 businesses on the decisions that you're going to
25 make. And the businesses, like that big rig,

1 don't steer quickly and deliver a good product
2 efficiently. They need lead time. And, they have
3 critical expertise. They have critical
4 capabilities. They know the markets. You know,
5 they are a really important part of this process,
6 and they need to be listened to.

7 Then there are the administrators. So
8 you're listening to one. The administrators are
9 going to have lots of opinions about what you
10 ought to say. And we have a lot of interest, so
11 we're going to have our own interests, we're going
12 to be, you know, we're going to be tooting our own
13 horn and, you know, we're going to be putting that
14 before you. But what I want to say today is when
15 you think of administrators in the future, whether
16 it's, you know, involves some of the current
17 administrators or not, I want to say what I think
18 makes for a successful administrator are clear
19 goals, measurable objectives, incented
20 performance, and that you pick administrators who
21 have knowledge and credibility in the markets and
22 with the players that you want them to succeed
23 with. Which include the market players, include
24 the think tanks, the place where the technologies
25 come from, the customers, the regulators, the

1 national labs. All of the players.

2 And not least, the regulators and the
3 role of regulation in this. I think the
4 regulators have been very key to this process in
5 terms of being the focal place where direction
6 gets set. You know. We all have opportunities
7 every day to set direction, but if we, you know,
8 the only -- the only place where everybody in this
9 room lines up is at this table. That's the only
10 place. Once we get out that door, we have a
11 hundred different conflicting priorities, and
12 we're going to work it a hundred different ways.
13 This is the only chance you have to set one clear
14 direction for everybody in the room.

15 And also, this is the place where you
16 ought to measure the results, and this is the
17 place where you ought to reward the performance.
18 That's really what's key to the oversight
19 function.

20 And the last thing I want to say is that
21 you won't hear from all the administrators today,
22 and they're here in the room. You're going to
23 hear from them a lot. But what I want to say is
24 they're also available to you for just data.
25 Okay. Because they do have a lot of data about

1 what's going on right now, and they want to make
2 that available. They're going to give you a lot
3 of opinion. I'll give you a lot of my opinions.
4 But you need to realize that they're also
5 available to you for just straight information,
6 you know, about what's in this rig that's coming
7 your way that you're going to run and own.

8 That's it. Thanks.

9 PRESIDING MEMBER LAURIE: Thank you,
10 Chris. Thank you.

11 MR. MESSENGER: I just have one
12 question. It has to do with your analogy of
13 trying to make sure that the rig is moving and
14 steering slowly, as opposed to taking radical
15 turns to the left or the right.

16 If the Commission were to take that
17 seriously, do you think it's important for us to
18 give a general sense of what kinds of programs we
19 want in this transition report, so that the new
20 administrator would have a year and a half, let's
21 say, time -- lead time before they actually took
22 charge on January 1st, 2002? Or would you --
23 would you caution us not to get too detailed in
24 terms of what kinds of programs we're looking for,
25 and let that evolve over the next 18 months, let's

1 say.

2 MR. CHOUTEAU: I really encourage you to
3 be as clear as you can in this report about the
4 kind of directions you think the state ought to be
5 studying. Clear objectives, overall objectives
6 that really unify this community and what we're
7 delivering. That's very helpful.

8 A year and a half down the road is
9 actually only about 125 feet. So it's not enough.
10 You want to tell me to turn in the year and a
11 half, it's not enough. So you need more lead time
12 than that. And I think you'll hear that from
13 customers and other market players.

14 MR. MESSENGER: Thank you.

15 PRESIDING MEMBER LAURIE: Thank you.

16 Anybody else desire to offer thoughts or
17 comments to us this afternoon?

18 MR. GUSTAVSON: My name is Dale
19 Gustavson, and I'm kind of playing two roles
20 today, principal of D.A. Gustavson Company, Energy
21 Efficiency Consultant, and also here representing
22 Penton Media, publishers of Contracting Business,
23 the largest magazine in the HVAC contracting
24 industry; Heating, Piping, Air Conditioning, the
25 largest in the mechanical engineering field; and

1 Energy and Environmental Management, which is a
2 magazine written by and for property and facility
3 management professionals.

4 Let me start with just some personal
5 comments, perhaps just to be provocative.

6 With regard to administrators and
7 concern about them being put out of work. I think
8 they have a tremendous opportunity to put
9 themselves out of work, because if they are very
10 successful they will create an industry and a
11 market in which they can go to work in a private
12 sector capacity and live happily ever after. I
13 mean, if that isn't enough incentive for most of
14 the folks in the room that really believe in all
15 this stuff, I don't know what is.

16 With regard to administration. However
17 you come down on the issue, and I've -- I'm on
18 record as stating this before. I believe that
19 whoever administers the funds cannot be
20 positioned, even accidentally, as more credible
21 and more visible than the private providers of
22 these goods and services. It has to do with the
23 fact that buyers and sellers kind of need to get
24 together and learn how to buy and sell, and the
25 sellers need to be credible; in fact, so credible

1 that they're trusted.

2 And for that reason, not -- I have been
3 at least trying to make the point that utilities
4 should not continue to administer the funds. Not
5 because they're bad people, not because they don't
6 have expertise, and not because they don't bring
7 an awful lot to however we do this next. Hire
8 them. Use their expertise in other ways. The
9 utilities themselves will never vanish from our
10 view. They are still there. And as long as they
11 are seen as more credible by the buyer, or a
12 source of money for the seller, the two don't
13 create markets. They simply rely upon
14 intervention.

15 So I am -- so that's provocative
16 question number two. Or comment number two.

17 Three, again, just speaking for myself.
18 In a subcommittee hearing that I had the pleasure
19 of participating in, Senator Pease said something
20 along these lines. This is not a quote. I'm not
21 sure we're here to prop up the energy efficiency
22 industry. I would caution that as you take up
23 your charge, that you're careful not to prop up
24 the electric power industry, as it restructures,
25 by marketing energy efficiency under the name

1 energy services. Even using that technology -- or
2 that terminology.

3 It already happened today. There was an
4 acronym used, ESP, Energy Service Provider. And
5 in fact, energy efficiency is provided by a whole
6 slew of people, the kind of people that provide
7 the services that Guy Nelson mentioned. You talk
8 about safety and health and comfort, and
9 productivity. These -- these goods and services
10 are provided by a whole slew of other market
11 actors that -- that Loren mentioned. We've got
12 HVAC contractors, we have electrical contractors
13 like Mr. Link. We have industrial hygienists and
14 indoor air quality specialists, and lighting
15 companies, and mechanical engineers and electrical
16 engineers. Building engineers. A whole slew of
17 people who are part of the infrastructure.

18 And so when we start saying we're
19 providing energy services, and I'm just a private
20 sector guy, and I'm -- I'm thinking if I -- what a
21 marketing edge I would have if my -- if I'm an
22 energy provider, but all the -- if I can create
23 the impression in the marketplace that an air
24 conditioning system is an energy system, then who
25 would -- who would you call if you're the

1 consumer, and you've got a problem with your
2 energy system that provides cooling. You call the
3 energy company.

4 I think -- real careful because as Loren
5 has pointed out, there is this huge
6 infrastructure. There's 90,000 HVAC contractors
7 in this country with payroll. There's about a
8 same number of electrical contractors. I don't
9 have the numbers on the mechanical and electrical
10 engineers. They are all buying and selling to one
11 another. They're wholesalers or manufacturers.
12 Energy efficiency can be sold under lots of
13 different names. And bundled a lot of different
14 ways. If we could move all of those people one
15 foot, that would cost a lot less than trying to
16 start a whole new industry, under a whole new
17 name.

18 So I, you know, I just -- and that --
19 that part was kind of the speaking on behalf of
20 the three magazines, who live in those worlds and
21 understand that most of the folks here, most
22 utilities don't go to those association meetings.
23 They don't go to those national conferences. They
24 aren't engaged with the industry leaders. They
25 are -- you have an opportunity to structure

1 whatever you do not only acknowledging that they
2 exist, but by finding ways to engage them in the
3 process.

4 PRESIDING MEMBER LAURIE: Thank you, Mr.
5 Gustavson. Comments are appreciated.

6 We have a gentleman in the back that
7 wanted to speak to us.

8 Anybody who desires to speak who has not
9 as yet spoken.

10 MR. NELSON: Thank you, Commissioner,
11 for the opportunity to speak again. I just wanted
12 to respond on one point that came up twice in the
13 afternoon. And Mike Messenger of your staff
14 pointed out that you're looking closely at it.
15 And I felt that a balancing comment was due on it,
16 particularly since we are commenting directly to
17 the Utilities Commission on this question of load
18 management and peaking.

19 So if I were to phrase the question --
20 this is Will Nelson for Residential Energy
21 Efficiency Clearinghouse. Should PCG funds and
22 should the EE programs be addressing load
23 management strategies. Our answer to that is
24 unequivocally yes, they should be. This should
25 not be regarded as an either/or question, or some

1 sort of almost libertarian market ideology that
2 says pricing is going to solve this problem.

3 If we've seen anything in energy
4 problems and energy crises in different eras is
5 this -- there is a certain amount of inelasticity
6 to the problems in the markets, and the demand
7 uses. So we -- we do, just to be brief, there is
8 a planning function that's due. There are
9 strategies, and there should be a public sphere of
10 strategy in this area to address it.

11 I would also have to say I believe that
12 there are many untapped and undiscovered
13 opportunities in the residential sector, small
14 commercial sector, many other sectors, that can
15 contribute to alleviating the peak demand
16 problems. And I'd have to again say it would be
17 an unacceptable roll of the market dice for the
18 regulating agencies to not address this question
19 with the EE funds, and I think you would find a
20 lot of the public quite surprised that this issue
21 is not being addressed, at least at some level,
22 and it is not very much, at this point. And we
23 found, after two years of evolution, program
24 design evolution, we reached the point recently
25 where we saw so little effort being made in this

1 load management area that we've addressed it, and
2 we're elevating it as an issue at the Utilities
3 Commission itself, currently.

4 Thank you.

5 DEPUTY DIRECTOR MATTHEWS: Will, I think
6 Peter left, but let me -- what -- Peter's reason
7 for saying -- and if Lenny Goldberg was here I
8 think he'd be making the same argument Peter made,
9 at least I've heard him make it -- the -- I mean,
10 I'm sorry. Lenny would be agreeing with you. But
11 Peter's argument was well, the purpose of energy
12 efficiency Public Goods Charge programs is to save
13 energy. Load shifting is just that. Doesn't
14 necessarily save energy, just changes the time of
15 day that it's used.

16 What's your response to that? Are you
17 seeing a different goal for the programs?

18 MR. NELSON: Okay. I think his analysis
19 is very limited, very narrow. I'll give a couple
20 of examples. Is there not in fact substantial
21 imbedded energy costs, imbedded economic cost to
22 building an additional peaking plant? Are there
23 not, in fact, economic costs and health costs to
24 elevated ozone levels and particulate levels, if
25 we have a much -- much more elevated peaking

1 issue? Are there not economic costs to surging,
2 blackouts, brownouts, to increasingly sensitive
3 and sophisticated electronic and ship based
4 equipment?

5 Those are just three. I think there are
6 very substantial economic savings, and the energy
7 savings, when we look at an imbedded analysis to
8 managing the peak problem.

9 PRESIDING MEMBER LAURIE: Anybody else
10 desire to give thoughts?

11 MR. FERGUSON: Thank you, Mr. Chairman.
12 Rich Ferguson, from the Sierra Club.

13 I'd just like to take a minute to
14 clarify one of my comments. In talking to staff
15 at lunch time, and listening to the comments, I
16 realize that my presentation today was based on my
17 reading of AB 1890, which says that these funds
18 are intended for cost effective energy efficiency
19 and conservation.

20 And I think if, you know, to the extent
21 that the programs are designed to reduce loads
22 cost effectively, those can be accurately
23 quantified, and I think the independent non-profit
24 model for administering those programs is the
25 appropriate one. But you've also heard people who

1 want money for education, money for university
2 research, for economic development, a whole other
3 host of things that I don't think you can
4 quantify, that the load reductions that are going
5 to accrue from that -- those programs.

6 I do not think that the non-profit model
7 is the right model for administering those kinds
8 of programs. They're quasi-political in nature,
9 and my guess is that they should stay in the
10 Commission. So I submit that one of the things
11 that you should ponder in this report and make a
12 recommendation on is how much of this money is
13 going to be used for actual quantifiable cost
14 effective load reductions, and how much of it is
15 going to be, what shall I call it, softer programs
16 designed to research -- what was that, theory
17 based market transformation or education or
18 community development types of things.

19 And you might actually consider two
20 different administrative approaches for those two.
21 One, as I suggested, a ISO model under the
22 oversight board, and another one in the program
23 division of the Commission.

24 So, thank you.

25 DEPUTY DIRECTOR MATTHEWS: I have a

1 question. When you said that I was a little
2 troubled by how you said it, and I interpreted it
3 particularly at -- and you just said it again, and
4 I think I got right.

5 You said the ISO oversight board is a
6 model that we should look at, and some kind of
7 Energy Commission non-profit in the same kind of a
8 relationship. When you said it the first time it
9 sounded like well, the new -- this non-profit
10 ought to be under the oversight board, which
11 seemed to be a mismatch of function. So it isn't
12 -- it isn't necessarily under the EOB, it's under
13 the Energy Commission, or whatever the Energy
14 Commission evolves to.

15 MR. FERGUSON: I think it could be
16 either. I mean, I would like guidelines, you
17 know, what their mission is, you know, what their
18 budgets are, what kind of auditing and reporting
19 is required. Those need to be set up so that the
20 administrator, you know, is running the program in
21 a way that everybody can understand, and the
22 results are quantified and audited, and all that.

23 It just -- we already have two like
24 that, and they are overseen by the oversight
25 board, and it makes sense, if you're going to

1 create a third, to have that in the same kind of
2 model. It doesn't have to be. It could be
3 overseen by somebody else. But it should be that
4 mechanical, where you -- where the Commission's
5 role -- and I'm sort of assuming that something
6 like the initial SB 110 model takes place sometime
7 in the future, whether it does or not. But, I
8 mean, the oversight in that case, when everything
9 is quantifiable, is election of board of
10 governors, approval of -- of bylaws and operating
11 procedures, and that -- that kind of stuff.

12 The program design is left to the
13 market, and is -- is market driven, with the
14 exception that you are going to want to divide it
15 for equity issues between customer classes and
16 hard to serve customer groups, as has been
17 mentioned, and things like that. But it should be
18 run pretty much by the book. Whereas the other
19 stuff, you really have to make day-to-day
20 decisions about, feedback loops and pilot projects
21 and that kind of thing.

22 So I think one of the things you may
23 need to consider is how to split up these two
24 ideas that you've been hearing today, and, you
25 know, how much money one is worth relative to the

1 other and who should be -- my suggestion is two
2 different entities should operate those two
3 different programs.

4 So, thank you.

5 MR. MESSENGER: A quick follow-up.
6 That'll teach you to come back.

7 (Laughter.)

8 MR. MESSENGER: I'm actually intrigued
9 by this idea of separation, but I want to ask a
10 little bit about it. I heard you say that you
11 don't think information programs can be
12 quantified, and I guess from my perspective they
13 do that all the time in the private sector. They
14 call it advertising, and they do quite a bit of
15 studies about how effective various kinds of
16 information programs are selling product.

17 Could you talk a little about whether
18 you think there's any problem from separating
19 essentially the advertising function from the
20 delivery function in an administrative model?

21 MR. FERGUSON: You maybe have seen more
22 than us. I have not seen any reliable results on
23 how much energy, say, not to pick on Chris, but
24 the PG&E Energy Center has saved. I mean, there
25 may be some. I just don't know what their -- but

1 to my mind, that's hard to quantify.

2 My recommendation for people who want to
3 run those education programs would be to partner
4 with the -- with the service providers in their --
5 in their community and to build the cost of the
6 city's involvement, of the local entity's
7 involvement into the subsidies, if you will, that
8 they are bidding for their program, so that when
9 you bid, you know, I want a penny and a half per
10 fuel that are saved, at whatever, that that
11 includes, you know, something to get the local
12 entity to be able to help with, and just to build
13 those costs in and make them competitive.

14 But I don't know any other way to do it.

15 PRESIDING MEMBER LAURIE: Rich,
16 additional clarification, please.

17 Did I hear you correctly, did you say
18 that in the view of yourself or the Sierra Club,
19 and if it's one or the other let me know, that the
20 design of the program should not be determined
21 based upon public interest, but rather should be
22 market driven, and perhaps you can distinguish
23 between market driven and public interest, and
24 maybe not. Is it your belief that guidance
25 criteria characteristics of a program should not

1 be developed pursuant to an overall strategic
2 plan, for example.

3 MR. FERGUSON: Well, again, I might make
4 a separation between actually going out and buying
5 megawatts and other activities, like education and
6 pilot programs for theory based market
7 transformation, and so on. And my initial
8 comments didn't deal with those at all.

9 But I think, I mean, in terms of just
10 going out and acquiring load reductions at the
11 lowest possible cost, I do not think that the
12 state or theorists at the university should be the
13 ones designing those. I think the people that are
14 going to go out and do the services and rebuild
15 the infrastructure in the state are the ones to do
16 that. And excepting for equity considerations,
17 and I have a comment there in -- in my written
18 comments. There are equity considerations.

19 As somebody else mentioned the issue of
20 hard to reach customers that have been under-
21 served in past programs, and that's a real issue.
22 And there are low income programs that need
23 special treatment. And, in fact, in addition to
24 all the public benefits from these programs, there
25 are also private benefits from the people who are

1 receiving the programs, the money.

2 So there are these equity
3 considerations, so that, you know, you aren't
4 going to want to dump all the money into, say, the
5 industrial commercial sector, even though the kind
6 of savings that I was talking about this morning
7 in terms of price reductions, it doesn't matter.
8 But there are private benefits, and so I think the
9 programs do have to be divided up according to
10 customer classes and hard to reach customers and
11 things like that.

12 But other than that, no, I do not think
13 the state has a role in -- or any kind of
14 theorists have a role in designing those programs.
15 I think they should be left to the market, and
16 just acquire them as cheaply as possible. You
17 want to put this to get megawatts as cheaply as
18 you can, and how much do you want to diddle the
19 system.

20 PRESIDING MEMBER LAURIE: Thank you,
21 Rich.

22 Yes, ma'am. Ms. Wood.

23 MS. WOOD: Yes. Again, I'm Lisa Wood
24 from the City of San Diego.

25 Since the issue of measurement and

1 measurable goals came up, I couldn't control
2 myself and had to come up here.

3 I've had a lot of opportunity to work
4 with that, because I'm responsible for AB 939
5 programs for the City of San Diego. And as you
6 know, we have a very measurable goal that
7 jurisdictions are required to comply with. So
8 it's not really a goal, it's a requirement.

9 And there are pros and cons to that --

10 PRESIDING MEMBER LAURIE: And AB 939 is
11 waste reduction, is it not?

12 MS. WOOD: AB 939 is the Integrated
13 Waste Management Act of 1989, which requires all
14 jurisdictions in the state to reduce the amount of
15 waste they dispose of by 50 percent by the year
16 2000.

17 The plus, on the plus side of a
18 measurable goal like that is we have extra
19 ammunition when we go to council to get funding
20 for our programs. You know, you don't do this,
21 you get a fine of \$10,000 per day. That's an
22 incentive to take part of that pot and put it
23 aside for waste reduction programs.

24 On the other hand, you were talking, Mr.
25 Messenger, about measuring the effectiveness of

1 all your programs. Not all of the programs that
2 are necessary are measurable, and some of the
3 programs are desirable, politically desirable, but
4 not -- don't necessarily result in all that much
5 actual measurable diversion. So you get into a
6 problem then of how much -- and we have to do
7 annual reporting, and we have to do all this
8 documentation to the state, and then there's the
9 good faith effort issue. How much time do you
10 spend documenting things versus actually
11 implementing your programs.

12 So I think it's very, very important
13 that you strike a balance. Yes, there are
14 benefits to having measurable goals, to having
15 targets, but be careful how much red tape you
16 generate in terms of measuring each and every
17 thing that you do. That's just based on my
18 experience with that particular situation.

19 Thanks.

20 PRESIDING MEMBER LAURIE: Thank you very
21 much.

22 MR. SCHILLER: Hi. Steve Schiller,
23 again. I just wanted to respond to two of the
24 questions, I think, that have been asked by the
25 panel, just sort of give a little different

1 opinion.

2 One of those was the question concerning
3 the load management. I feel that doesn't belong
4 in the energy efficiency programs, and I think
5 that as consideration of that you should look to
6 see what the independent system operator is doing.
7 They're doing a program where the energy providers
8 are bidding into the system to provide load
9 management. I think that's where that belongs,
10 and not with the energy efficiency programs.

11 And also I believe there was a question,
12 Mike, that you had asked, about whether in the
13 report you should indicate what type of programs
14 should be provided. I think that might be nice at
15 some point, although I'm concerned, as I think
16 Rich Ferguson mentioned, that -- as to who's going
17 to define how to do this, whether it's a theory
18 based or whether it's the marketplace that defines
19 that. I think it would be better for the
20 marketplace to define, or to be made.

21 But I think it would be very useful if
22 you can define is what the clear objective is.
23 What we have in 1890, as I mentioned before, is
24 spend a certain amount of money. I don't think
25 that's a very good goal. If you could take the

1 time between now and November to define clearly
2 what the objective is, you know, how much KWH, how
3 much KW, pollution reduction, percent of load
4 growth, whatever, I think that would be quite an
5 achievement, and then as time proceeds the
6 marketplace, or whoever, can define where the
7 programs make sense to meet that objective, versus
8 defining here are the programs, and therefore
9 defining some goals.

10 Thank you.

11 PRESIDING MEMBER LAURIE: Thank you, Mr.
12 Schiller.

13 Anybody else? Sir. Mr. Dunn.

14 MR. DUNN: Tony Dunn, with the Sierra
15 Energy Center.

16 I just want to make a comment. I
17 believe Mr. Ferguson, of the Sierra Club -- is
18 that correct?

19 With respect to education, you were
20 having a discussion with him, and you referred to
21 advertising. And one of the biggest things that
22 we do is marketing energy efficiency programs. It
23 is impossible to have an energy efficiency program
24 without marketing, advertising, education,
25 whatever you want to call it. You can have a

1 program on paper, but if nobody participates in it
2 because they don't know about it or understand it,
3 or understand the benefits, it isn't really a
4 program.

5 And I think you're going to be forced,
6 however you administer this thing, to consider
7 education, advertising, marketing, whatever you
8 want to call it, as an integral part of it. You
9 have to make the program a success, and in order
10 to make it a success you have to get the word to
11 people, in whatever form. Whether you're working
12 through schools, TV ads, newspaper inserts, bill
13 inserts, whatever it is, that's a critical
14 element.

15 So I don't think you can separate out
16 that element of the program. It is an integral
17 part of it. And I think you'll find that there
18 are other things that don't seem to directly pay
19 into kilowatt hours saved, that are integral parts
20 in order to make the program a success, however
21 it's administered.

22 Thank you.

23 PRESIDING MEMBER LAURIE: Anybody else?

24 Mr. Sugar.

25 PROGRAM MANAGER SUGAR: Well,

1 fortunately, we have more workshops coming up for
2 those of you who had a good time.

3 (Laughter.)

4 PROGRAM MANAGER SUGAR: Before I go
5 further, I would like to thank Don Kazama, who I
6 think is up here, and Maxine Botti, who is at the
7 back of the room, as well as Wendy Bader.

8 Getting set up outside of our normal
9 venue is a lot more work than it appears. For
10 those of you who've seen "Antiques Road Show",
11 with the semi trucks and all, it's not that bad.
12 But it does become quite complex, and they've done
13 a wonderful job in making this happen. We're
14 hoping that the balance of our workshops go a
15 little bit more smoothly on the administrative
16 end.

17 Looking at -- listening to the comments
18 today, it sounds like a lot of the work which we
19 are going to have to address probably in the next
20 workshop will revolve around goals for the
21 program. It seems to me, and from talking to some
22 of the team leads, that this seems to be the area
23 in which a lot of the commentary falls. Staff has
24 been involved in quite a few internal sort of
25 chicken and egg discussions. What comes first, an

1 administrative structure or a goal for the
2 program, and an approach to -- to program goals,
3 and more and more it appears to us that program
4 goals and designs and considerations are going to
5 drive many parts of the report, including
6 administrative structure.

7 So staff will be getting together in the
8 next couple of days to work on an agenda for the
9 next workshop. It's tentatively scheduled for
10 September 9th. We are expecting to be holding
11 that workshop -- this is with the Committee,
12 Commissioners Laurie and Pernell -- we expect to
13 be holding that in our building.

14 Is there a question? No?

15 We expect to be holding that here.

16 Well, good, we have practice.

17 (Laughter.)

18 PROGRAM MANAGER SUGAR: It appears that
19 we will be focusing at least some of that day on
20 program design. We'll be getting a more detailed
21 agenda out very shortly.

22 The following workshop will be October
23 12th. That will be focused on additional issues,
24 and we're going -- staff is going to be working to
25 set that up.

1 Finally, we are expecting a final
2 Committee workshop, with Commissioners present, in
3 November, and that will be a workshop to discuss
4 staff's draft. We anticipate having a draft out
5 by early November. We are trying to find a date
6 when we can corral both Commissioners at once,
7 which becomes complicated because their schedules
8 tend to become filled very quickly, so that we can
9 get comment on the draft. And staff will be
10 taking direction from the Commissioners to modify
11 the draft so that we can get it to the full
12 Commission in very early December.

13 Given that we need to get a notice out
14 for the September 9th workshop, we need to have
15 something out by the end of this week so that
16 there are at least two weeks for parties to
17 prepare for the workshop. We need -- we will be
18 getting together this week to get together our
19 comments from this one.

20 A number of comments were repeated.
21 These included that whatever administrative
22 structure we come up with must be nimble, avoiding
23 long delays. We've heard both privately and in
24 the workshop today that hiatuses in program
25 operation are terribly destructive to the goals of

1 energy efficiency, and we need to try to avoid
2 those at any cost.

3 There are multiple reviews regarding the
4 best administrative structure. That's come to us
5 even before this workshop, and listening to the
6 workshop that's still the case. Many of those
7 issues will probably be resolved, at least in
8 staff's mind, as we go ahead and try to resolve
9 the issues of the goals and form of programs, the
10 overall goal of energy efficiency programs.

11 Programs should be simple and market
12 driven. We've heard that in a number of forms.
13 And we continue to hear that there should be
14 multiple measures of success, not just bang for
15 the buck, but that saving kilowatt hours creates a
16 variety of benefits. Many benefits accrue from
17 trying to deal with under-served markets, and it
18 sounds like we need to involve local agencies in
19 our discussions.

20 Are there any that I seem to be missing
21 that have come across?

22 Given that, are there questions about
23 the process? Please.

24 FROM THE AUDIENCE: I have -- I
25 apologize for not having read this whole thing yet

1 as far as access to people -- material so people
2 that are submitting things, how does a party to
3 this process get those things. I notice that
4 there were things that were passed out to just you
5 all that I wouldn't have minded bringing back with
6 me. That would've been helpful, I think.

7 PROGRAM MANAGER SUGAR: I understand.
8 What we're asking is that anything that is
9 submitted to us, if it could please be submitted
10 electronically. Because this process is truncated
11 compared to most of the policy reports in which
12 the Energy Commission is involved, we are trying
13 to rely very heavily on list server. And we are
14 trying to put -- post everything that we receive,
15 where it normally would go to Dockets and then
16 would be available in written format, we are
17 getting the materials to Dockets but we're trying
18 to make them available on the list server
19 electronically, so that everyone will receive
20 them.

21 FROM THE AUDIENCE: I just had a
22 suggestion, and I'm not sure you can do this.
23 Work with the CBEE as the -- people sign up for.
24 If I was to submit something to you through the
25 process. Everybody gets it. And I wouldn't have

1 to check on your Website to see if ten minutes,
2 you know, I might have checked and then ten
3 minutes later something's posted. You just get it
4 instantly, if you sign up with that. It's fairly
5 inexpensive, I think.

6 PROGRAM MANAGER SUGAR: Well, we have --
7 I have to admit ignorance. Could you comment,
8 Maxine, how this is working?

9 MS. BOTTI: Sure. If you sign up on --
10 for the list server on our Website, you'll receive
11 the comments we --

12 FROM THE AUDIENCE: Automatically?

13 MS. BOTTI: -- you just check --
14 automatically.

15 FROM THE AUDIENCE: Oh, okay.

16 MS. BOTTI: So you won't need to keep
17 checking that.

18 FROM THE AUDIENCE: Okay. And then the
19 other comment that I had, procedure comment that I
20 had, is although I think today was very
21 informative, frankly, people could have written
22 all the stuff that they said down, and submitted
23 it to you. I mean, it was nice because I could
24 just listen rather than read, but I would have
25 been done in two hours, frankly.

1 I know you all have -- I -- my
2 preference is not to do that -- this again, that
3 way. So it would be really nice to do is the
4 topics that we're going to go through in the next
5 meeting, come prepared for that.

6 PRESIDING MEMBER LAURIE: Let me talk
7 about that for a minute.

8 And that is -- that was certainly
9 discussed by the staff and the Committee prior to
10 today. It is understood that anytime you spend a
11 day sitting at a conference it is an expensive
12 day. And we understand that. We understand that
13 the greater the specificity of the issue and the
14 greater the specificity of the discussion, the
15 greater the specificity of the answer. And -- and
16 the better the focus of the discussion. And we
17 certainly prefer that.

18 As noted at the beginning of the
19 workshop, however, this is a first meeting, and
20 this is also a meeting designed for the full
21 public, not even those necessarily who have an
22 economic stake or another stake in the process.
23 That's -- this workshop was specifically designed
24 to be general. It is our intent that every
25 workshop that follows -- and, again, we understand

1 that your time is valuable and we don't do this
2 for fun, contrary to Mr. Sugar's view --

3 (Laughter.)

4 PRESIDING MEMBER LAURIE: -- we will
5 have specific topics, we will have specific papers
6 for discussion purposes.

7 Other questions regarding process?

8 MS. TEN HOPE: I just have one comment
9 that there's another forum that might be of
10 interest to people in the audience. The existing
11 administrators are going to come and speak with
12 the Commissioners and fill them in on some of the
13 progress to date in programs to date. I believe
14 that's been scheduled for September 8th; is that
15 right, John?

16 Okay. So that'll be at our business
17 meeting, if you're interested in hearing status to
18 date.

19 PRESIDING MEMBER LAURIE: And that is a
20 regularly agendized item on our business meeting,
21 is it not?

22 Commissioner Pernell, do you have any
23 closing comments, sir?

24 COMMISSIONER PERNELL: Yes. Thank you.

25 Closing comments. I love this.

1 (Laughter.)

2 COMMISSIONER PERNELL: Let me just say
3 that it's been a long day. And again, I want to
4 thank you for attending. At the beginning I said,
5 you know, don't take anything for granted, let us
6 know, and I think you've done that.

7 We want you to participate in the
8 process. We'll lay the process out, we want it to
9 be user friendly. We'll have things up on the
10 Website. And I agree with your comment that it's
11 better to have it in writing, and then staff can
12 see it and we can kind of go over it a little bit.
13 I know I was -- everybody up here was taking notes
14 at some point. But it's also better to have your
15 thoughts down in writing, and if you could do that
16 electronically that would help us.

17 Again, I want to thank you, and look
18 forward to seeing you on the 9th. Thank you
19 again.

20 PRESIDING MEMBER LAURIE: Thank you,
21 Robert.

22 Ladies and gentlemen, that concludes the
23 meeting.

24 We understand the importance of the
25 legislative mandate. This program is a big deal.

1 The subject is important, and there is a lot of
2 money involved. Our efforts over the next couple
3 of months will be intense. We have 90 days to
4 write the report. That is not a lot of time.
5 It's basically a full-time post for the teams that
6 are working on it.

7 Again, your input is critical, so if you
8 cannot attend a workshop please provide material
9 in some other fashion.

10 Any other comment by staff present? Mr.
11 Sugar.

12 PROGRAM MANAGER SUGAR: One comment I
13 should have made. Staff is discussing having a
14 possible couple of staff workshops on specific
15 technical issues. We do not yet have dates for
16 those. We were waiting to hear what comments --
17 some of the comments made today. If staff decides
18 to hold those, we will notify the list server
19 immediately to give people as much time as
20 possible to plan to attend, if they are
21 interested.

22 PRESIDING MEMBER LAURIE: Thank you very
23 much. The meeting is adjourned.

24 (Thereupon, the Public Benefits Program
25 Workshop was concluded at 3:30 p.m.)

CERTIFICATE OF REPORTER

I, VALORIE PHILLIPS, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Workshop; that it was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said Workshop, nor in any way interested in the outcome of said Workshop.

IN WITNESS WHEREOF, I have hereunto set my hand this 26th day of August, 1999.

Valorie Phillips

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